

## Perth and Kinross Archaeological Research Framework

### Chapter 8. Post Medieval and 20th Century





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## 8.1 Introduction

In the centuries since 1600, Perth and Kinross has undergone vast changes. The experience of daily life for most residents of the region has been transformed, the agricultural and industrial revolutions have reshaped the local landscape and economy, and structures of governance have been repeatedly reorganised. Many of these shifts were recorded in written records, and on maps and photographs, and are arguably better studied by disciplines other than archaeological fieldwork. Yet archaeological techniques do still have a role to play in our understanding of how Perth and Kinross has evolved over the last 420 years. The key challenges for archaeologists studying the period are to identify when archaeology is of value, and to assess how the other rich and varied forms of evidence can be most effectively integrated.

This chapter will particularly focus on the years between the union of the crowns of Scotland and England in 1603 and the death of Queen Victoria in 1901 – the period broadly defined as post-medieval by Scotland’s Archaeological Periods and Ages (ScAPA). The coverage of the 20th century in this framework is deliberately limited due to the scale of the subject. As we come closer to the present, the sheer quantity of extant evidence creates issues about how best archaeological approaches can inform understanding of life in the recent past. The contemporary archaeology movement is currently highlighting the value of studying recent material culture as a topic of interest in its own right, rather than as a tool to inform interpretation of the more distant past. In this context, the last 100 years present exciting opportunities for archaeologists to work in partnership with other specialists and communities of interest (Graves-Brown et al [2013](#)). However, such approaches are typically beyond the scope of what it is reasonable to record in advance of development work. As a result, the funding opportunities for this area of contemporary investigation are often limited.

There are clearly some types of 20th-century monuments that are relatively rare, are currently at risk or for which we have few other sources of information. For example, many smaller industrial buildings and machinery are now quite unusual and are often imperfectly documented. We are also arguably living through a critical period regarding the preservation and understanding of military architecture from the World Wars, although in this case there is extensive written and photographic evidence which can complement the information which archaeology offers. Where possible, these topics of exceptional significance will be highlighted.

Many more standing, and roofed, buildings survive

from the post-medieval period than from earlier times. These extant structures provide remarkable opportunities for research. However, the changing requirements of modern communities and societal demands mean that their future is not assured. Increased recording and study of post-medieval standing buildings, including interiors, should therefore be a priority for researchers working in the region. Ideally, historic building recording should take place prior to demolition or major changes, but but this is not a requirement necessitated by current planning legislation for non-residential buildings. It would also be desirable for more standing buildings to be studied in less critical and time limited circumstances.



17th century Methven Castle in Perth © HES

A particular issue for the post-medieval period is the lower value that heritage professionals and the wider community often place on remains from the more recent past (Matthews [1998](#)). Greater appreciation of the research potential of different forms of post-medieval monuments and artefacts is needed. With artefacts there is sometimes a perception that museums’ social and local history collections provide a relatively full and representative sample of post-medieval material culture. However, contextual data can often be poor for elements of such collections. There is therefore a need to bring together historical and archaeological approaches to better understand the wide range of surviving material culture in the



region. By addressing what already survives in collections, and assessing these items' significance, we can help to inform future collecting policies and to develop improved research foci for archaeologists, historians and curatorial teams.

The centuries between 1600 and 1900 saw successive crises afflict Perth and Kinross. Although there were some stable periods, a series of political and economic upheavals repeatedly disrupted local life. The region was in the path of significant military campaigns during the 1640s, 1650s, 1680s, 1710s and 1740s, with certain military forces deliberately devastating the surrounding settlements and agricultural land. An important legacy from these periods of conflict was the construction of a network of military roads and bridges under the guidance of Major-General George Wade and his Chief Engineer (later Inspector of Roads in Scotland) Major William Caulfeild. Their building programme lasted from the 1720s to the late 1760s and introduced formal roads to many upland areas (Graham [1964](#); Farquharson [2011](#); [2012](#)). Whilst the region was spared incursions by hostile forces in the 19th and 20th centuries, conflict further afield, particularly during the Napoleonic era and the two World Wars, still had an impact on the architecture and economy of the area. Notable political turning points, such as the Act of Union of 1707 and the various Jacobite attempts to reclaim the throne, also had far-reaching financial and social consequences. For much of the period, religion was a similarly disruptive factor, with the Church of Scotland experiencing in the 17th, 18th and 19th centuries. These splits have left their mark on the design and distribution of local churches. Meanwhile, tenurial changes associated with policies of 'improvement' and 'clearance' caused hardship for many rural communities, and fundamentally re-ordered the use and appearance of the land.

These mostly human dramas played out against a backdrop of challenging weather conditions, which led to significant famines in the 1620s and 1690s. Although full-scale famine did not subsequently affect the region, there were various subsistence crises and agricultural slumps in both the 18th and 19th centuries. Epidemic disease often accompanied economic hardship: between 1600 and 1900, Perth and Kinross suffered outbreaks of plague, smallpox, cholera and typhus, among other diseases. The extent to which rises in mortality associated with these misfortunes can be discerned in the archaeological record is one of a number of research questions for the region.

Yet, despite the challenges that successive generations faced during the post-medieval period, this was in some respects a time of growth and development. Disruptive as the process of

'improvement' was, it almost certainly fostered greater agricultural productivity in some parts of Perth and Kinross. The 17th, 18th and 19th centuries saw considerable investment into many aristocratic estates, leading to new plantations, the founding of model villages and pioneering industrial ventures – innovations which still shape the landscape and built environment of today.

The burgh of Perth grew significantly during the post-medieval period, and became a major centre for leather goods and the weaving of linen and cotton; these products were exported to London and further afield. Perth's economic status was of course facilitated by its role as an inland port. The early 19th century saw the construction of a new harbour at Perth, although this ultimately became too small for most international shipping which largely resorted to Dundee instead. For many people, the 18th and 19th centuries were a time of unprecedented access to consumer goods, even as some aspects of their daily lives possibly worsened. Many of these historical trends have left distinct imprints on contemporary society, from the legacies of imperialism to the current climate emergency. Archaeological research can play a socio-cultural role in uncovering evidence from the material culture of this period and amplifying the issues they represent.



Perth Harbour © Bob Jones (CC BY-SA)

The story of Perth and Kinross in the post-medieval period is a complex one, with considerable variation between different localities and ranks in society. The archaeological record enables us to track the nationwide trends which affected Perth and Kinross, and can also help us to uncover the distinct experiences of specific communities, both of which are important research priorities.

## 8.2 Landscape and Settlement

### 8.2.1 Highland and Lowland Settlement

The underlying geography of Perth and Kinross has fundamentally shaped human activity. Where settlements were located, the type of farming undertaken, the route of military campaigns, and the industrial possibilities, were all fundamentally influenced by the region's landscape. Yet the post-medieval period also saw the residents of Perth and Kinross themselves make major changes to their surroundings. The centuries between 1600 and 1900 arguably brought more rapid and far-reaching alterations to the landscape than any previous period.

Developing our understanding of the nature of the varied landscapes in Perth and Kinross at the start of the post-medieval period, and their evolution over succeeding centuries, must be an important research priority. Perth and Kinross encompasses a wide range of different terrains. Notably, the region spans both upland and lowland areas – a geographic distinction which for much of the post-medieval period also had considerable cultural significance. The 17th and 18th centuries saw many English and Scots-speaking lowland dwellers characterising their predominantly Gaelic-speaking Highland neighbours as 'wild' and backwards. Yet there may be more complex patterns of interaction and cultural exchange which we can identify in the archaeological record. The nature of the relationship between upland and lowland areas is a topic of particular significance for Perth and Kinross.

Within the broad categories of 'upland' and 'lowland', there was considerable diversity in the use and appearance of landscapes over the post-medieval period. While some of the higher ground was probably moorland from an early date. The uplands of the 17th and 18th centuries also included various forms of pasture, arable land and woodland. There were also significant concentrations of pre-improvement settlements in the forms of townships ('fermetouns'), farms ('ferms') and seasonal shielings (used for transhumance). Much of this variety in land use was swept away during the late 18th and early 19th centuries in the name of agricultural 'improvement'; this is arguably a deeply problematic term, the implications of which are discussed in more detail in 8.3.1 Agriculture and Diet. The resulting more open and less diverse landscape was praised by many Victorian writers as being natural and untouched, but in reality, it was mostly a very recent creation to enable the raising of sheep, deer and grouse.

Diversity of landscape was even more apparent in

lowland areas. When in the 1760s the travel writer Thomas Pennant climbed Moncreiffe Hill near Perth, he commented on 'the variety and richness of its views'. From this vantage point, Pennant noted among other features: aristocratic estates, the 'rich plain of Gowrie', the 'vast cliff' of Kinnoull Hill, the 'meanders of the Earn', the 'noble river' Tay, numerous islands, the 'fine woods' of Perth Parks, and 'the town of Perth' itself with its 'magnificent bridge' (Pennant [1772](#)). The nature of the landscape, and the challenges and opportunities it posed, could be intensely local. For instance, whilst parts of the Carse of Gowrie were ideal for fruit growing and arable cultivation, within walking distance there were substantial areas of marsh and heavily waterlogged soil. Researchers should be sensitive to these highly localised experiences, and aware of the unique ways in which specific landscapes have evolved.

In many parts of Perth and Kinross, the post-medieval period was characterised by significant human alteration of the landscape. Bogs were drained, roads built, trees planted, old settlements cleared and new model villages established. These processes can often be traced in the archaeological record. However, they also mean that the landscapes we see today are often very different to those which existed at the start of the 17th century.

Interdisciplinary approaches can significantly enhance our understanding of lost landscapes, and one of the strengths of the post-medieval period is the extensive body of written and visual sources. For example, [Thomas Pont's maps](#) provide a valuable visual record of the geography of Perth and Kinross around 1600. Indeed, Pont created at least 14 different, and sometimes overlapping, map sheets for Perthshire. These maps are perhaps most famous for their small sketches of burghs and great houses. However, they also indicate several areas of woodland and certain lost or reduced bodies of water. Similarly, the engravings, and accompanying descriptions, of John Slezer's [Theatrum Scotiae](#) are an invaluable resource for the region's landscapes and buildings at the end of the 17th century (Slezer [1693](#)). William Roy's [Military Survey of Scotland](#), undertaken between 1747 and 1755, offers a particularly important 'snapshot' of the entire region at a time when the landscape was beginning an era of rapid change. Numerous less well-known maps and illustrations of the region also exist, particularly for the 18th and 19th centuries. Noteworthy is James Stobie's [The Counties of Perth and Clackmannan](#) published in 1783. Meanwhile, information about settlements and features beside the main roads through the region can be garnered from George Taylor and Andrew Skinner's [Survey and Maps of of the Roads of North Britain or Scotland](#),

published in 1776. A significant proportion of these maps and publications have already been digitised and are available [online](#). Careful comparison of information from historic visual sources with the physical evidence of the landscape would be desirable.



Map of post medieval Perth (Roy Military Survey of Scotland, 1747-1755) © National Library of Scotland

Estate papers, government records, travel accounts and the writings of naturalists are just some of the texts which provide evidence about the post-medieval environments of Perth and Kinross. Much of the material in the *Old Statistical Account* of 1791–1799 and the *New Statistical Account* of 1834–1845 is also invaluable. The [Statistical Accounts](#) are already well-known, but the data they supply about local landscapes arguably deserves more systematic analysis. Again, major digitisation projects have made access to many of these records much easier, although it should be noted that most surviving post-medieval written records from Perth and Kinross are still unpublished in any form. Further archival research may bring new perspectives for our understanding of the development of the landscape during the 17th, 18th and 19th centuries, and dialogue between archaeologists and historians studying the region is to be strongly encouraged. The potential advantages of integrating archival evidence with field survey and excavation were recently demonstrated by the Ben Lawers Historic Landscape Project, which has proved transformative for understandings of post-medieval land use in the area around Loch Tay (Atkinson [2016](#)).

Scientific methods and techniques must also be integral to our efforts to research historic landscapes – although the cost of some types of investigation can prove prohibitive for many projects. Among other approaches, much greater use could be made of anthrosols and pollen analysis. The extent to which the biodiversity of Perth and Kinross altered over the

course of the post-medieval period and how it was affected by phenomena such as industrialisation, changes in agriculture and shifting settlement patterns are important questions for researchers. There is also the potential for cross-sector public engagement regarding such issues, for example by mapping the impact of historic climate change and human land use on local biodiversity.



The River Tay frozen in 1895 at the North Inch © Culture Perth and Kinross Archives

The effect of climate change and extreme weather on the landscape is a topic of particular relevance to the period. The 17th century saw a series of exceptionally severe winters: in 1615 the River Tay at Perth froze over and there was ‘passage’ across the ice ‘for horse and men’ (Eagles [1995](#), 31). This period also saw several serious floods. Particularly notable floods are recorded in 1621, when Perth Bridge was destroyed, and in 1774, when rapidly melting snow in the hills caused significant damage in Perth and its environs (Bowler [2004](#), 73). Further research into the impact of the harsher climate on Perth and Kinross during the early part of the post-medieval period should be a priority. A wide range of techniques and approaches could potentially be brought to bear on this issue, including dendrochronology, pollen analysis and the study of human and animal remains, as well as field survey and work with written records.

### Research Priorities

PKARF Agenda 8.1: Detailed study of areas not covered by the major RCAHMS surveys of the late 20th century which focused on eastern Perth and Kinross.

PKARF Agenda 8.2: More interdisciplinary projects on the landscape in specific localities, with a particular emphasis on integrating different forms of evidence, including field survey, scientific techniques and written and visual documentation (eg estate papers and maps).

PKARF Agenda 8.3: Further research into the nature



of pre-improvement landscapes in the region and how they were altered by the upheavals of the 18th and 19th centuries.

PKARF Agenda 8.4: Greater recording of sometimes overlooked landscape features such as stone dykes and drainage ditches.

PKARF Agenda 8.5: Perth and Kinross straddles the highland / lowland zones and as a result water power is of particular importance in the area and should be prioritised for study.

### *Research Questions*

PKARF Qu 8.1: What was the landscape like in different parts of Perth and Kinross before the age of ‘improvement’?

PKARF Qu 8.2: How did the division of common lands and processes of ‘improvement’ affect the region’s landscape?

PKARF Qu 8.3: Is there evidence of changes in biodiversity in Perth and Kinross during the post-medieval period?

PKARF Qu 8.4: How did changing climatic conditions affect the landscape in Perth and Kinross during the post-medieval period?

PKARF Qu 8.5: How did land use in upland and lowland areas compare?

PKARF Qu 8.6: How helpful is the concept of a Highland / Lowland divide?

PKARF Qu 8.7: What could a systematic survey of water-powered sites, from early water mills to 20th century hydro-power schemes tell us about the use of sustainable energy in the past, and potentially in the future.

### 8.2.2 Woodlands

By the early 1600s, much of Scotland was already reliant on imported timber. However, it is likely that the use of native timber continued significantly later in Perth and Kinross. Wider application of dendrochronology, which can reveal both timber source and date if sufficient comparative data is available, could prove transformative for understanding the extent of woodland cover and the evolution of the timber industry in this region (Crone and Mills [2013](#); Mills et al [2017](#); Mills [2021](#)).

While the history of Scottish woodlands is often assumed to have been characterised by long-term decline, the reality was probably more complex. Dendro-climatological research on native pine shows that the 1690s were the coldest decade in Scotland in the last 800 years (Rydval et al [2017](#)). This decade,

which saw extensive crop failure and famine, may have seen an expansion in woodland (Dawson [2009](#)). The oldest pine trees dated at Rannoch are from the very late 17th century, and it is possible that a reduction in grazing pressure enabled woodland to regenerate at this time (C Mills pers comm).

Wood pastures formed an integral part of the cattle-based pastoral system which was common in upland Perth and Kinross before ‘improvement’ by sheep grazing in the 18th and 19th centuries. Wood pastures provided important sheltered grazing for over-wintering cattle (Mills et al [2013](#)). Where it survives, old wood pasture typically has a high level of biodiversity. Such woodlands provide a living reminder of past patterns of farming, and can preserve other archaeological remains, particularly those associated with traditional pastoral life.

During the 18th century, trends in woodland management altered. Increasingly Scottish aristocrats moved away from the tradition of managing forests for hunting. Instead, more industrial and extractive interests gained ground (Mills et al [2013](#)). The processes by which old woodland was cleared can be reflected in the archaeological record through features like charcoal platforms. Political upheaval sometimes hastened changes in how woodland was exploited. For instance, there is evidence that when the estates of the Robertsons of Struan, on which the Black Wood of Rannoch grows, were forfeited in the 1740s, the Commissioners of Annexed Estates imposed new forms of woodland management. The Commissioners enclosed the Black Wood and stopped tenants from sheltering stock within the woodland.

Dense woodland was traditionally another important resource for the general population, providing firewood and construction materials. The ‘improvement’ era was characterised by the taking into private control of what had previously been common resources, such as access to sources of timber, thatch, turf and clay. This is reflected in construction practices, tenancy rights and the built heritage from the period. Alongside the loss of common land rights and vernacular construction processes, there was a move towards processed construction materials and professional procurement which is discernible in the built heritage. Further interdisciplinary research into these changes would be desirable.

Whilst some 18th-century landowners, particularly in the uplands, destroyed traditional woodland, others established new plantations. During the 18th century, many areas of Perth and Kinross saw the extensive development of plantations, policies and wider designed landscapes. For instance, it was



noted in the 1790s that in the countryside around Dunkeld the Duke of Atholl had ‘planted upwards of 4,000 acres’ of larches ‘intermixed’ with a small proportion of Scots firs (Anonymous [1798](#), 434).



Larch tree at Dunkeld, one of the oldest larches in Europe © MJ Richardson (CC BY-SA)

Thus far, there has been no dendrochronological work on the, probably, 18th-century designed landscapes of Perth and Kinross. However, recent work outside the region at Dougalston near Milngavie demonstrates the possibilities when tree-ring data is combined with archaeological, cartographic and written evidence. For instance, the age and location of trees at Dougalston enabled the dating of designed features such as hahas (Bishop et al [forthcoming](#)). A degree of historical research has been undertaken into improvement era plantations in Perth and Kinross, which were often planted over earlier farming systems and settlements (Lindsay [1974](#); Smout et al [2005](#)). In this context it should perhaps be noted that the sources of wealth

which funded plantations and improvement is a topic of considerable research interest. Money from European expansion overseas, including involvement in slavery, was sometimes used to develop and adapt the Scottish landscape.

Interdisciplinary approaches have considerable potential to further our understanding of the complex history of woodland in Perth and Kinross. When evidence from tree-rings, tree-forms, archaeological remains, historic maps and written documents are combined, highly detailed chronological information can be obtained. Thus far dendrochronological investigation in Perth and Kinross has been limited. However, there is reason to believe that this region might have had different experiences of woodland management from more studied areas along the east coast, which had mostly experienced significant deforestation before 1600. Examination of historic buildings just outside the borders of Perth and Kinross has revealed the use of native pine, ash and oak into the post-medieval period (Mills and Crone [forthcoming](#); Mills et al [2017](#); Crone and Mills [2013](#)). Given the more wooded state of present-day Perth and Kinross, a greater focus on this region could prove transformative for our understanding of the evolution of Scottish woodland.

### *Research Priorities*

PKARF Agenda 8.6: Developing long tree-ring chronologies for the post-medieval period in Perth and Kinross.

PKARF Agenda 8.7: Undertaking interdisciplinary historic woodland investigations.

### *Research Questions*

PKARF Qu 8.8: How did the extent and type of tree cover in Perth and Kinross alter during the post-medieval period?

PKARF Qu 8.9: How quickly did new tree species spread through the global collecting of botanists?

PKARF Qu 8.10: To what extent was there an expansion in woodland during the hard years at the end of the 17th century?

PKARF Qu 8.11: How was woodland managed and exploited?

PKARF Qu 8.12: How extensive was wood pasture and can we identify surviving examples?

PKARF Qu 8.13: What areas of woodland survive from the 17th and 18th centuries?

PKARF Qu 8.14: What impact did processes of improvement and the creation of 18th- and 19th-century designed landscapes have on the management of woodland?

PKARF Qu 8.15: To what extent can timber from historic buildings help us understand the post-medieval woodlands of Perth and Kinross?

PKARF Qu 8.16: How can we best investigate the post-medieval remains preserved under more recent plantations?

### 8.2.3 Wetlands

Even today Perth and Kinross has considerable areas of marsh and other wetlands, and these were much more extensive at the beginning of the post-medieval period. The 17th, 18th and 19th centuries saw drainage projects in many parts of the region. Particularly extensive drainage took place in the Carse of Gowrie. In the mid-18th century, the travel writer Richard Pococke noted that the Carse of Gowrie ‘was all a morassy soil till it was drained some years ago’ (Kemp [1887](#), 259). Similarly, in the 1790s the minister of St Madoes remarked on the decline in prevalence of the ‘ague’, probably a term for malaria, in the Carse of Gowrie. He attributed this change ‘to the rapid improvements in agriculture, particularly ... the draining of the low marshy ground, which formerly lay under water during a great part of the year’ (Black [1792](#), 569).



Carse of Gowrie © Paul Taylor (CC BY-SA)

Field drains and other remains of post-medieval drainage efforts are frequently discovered during excavation. Often these features are regarded as of limited interest and little effort is made to date them. Yet they provide evidence for important changes in the use and appearance of the land. Further study

of the form and distribution of post-medieval drains might yield valuable insights regarding both the lost wetlands of Perth and Kinross, and the processes by which these areas were drained and improved. The manufacture of ceramic field drains is an under-researched topic, and is of relevance to this region. The brick kilns at Errol were an important local production centre for field drains and their surviving products in museum collections, and any business archives, might benefit from fresh examination.

Greater research into how undrained wetlands were exploited during the post-medieval period would also be desirable. In particular, interdisciplinary investigation of the planting of reedbeds in the River Tay could be of interest. The Tay has the largest area of continuous reedbeds in the UK and commercial harvesting of the reed for thatching continued until 2005 (Price [2020](#)).

In contrast to natural wetlands, water was also deployed to irrigate certain areas. Notably, there is evidence for the deliberate creation of English-style water meadows during the 18th and 19th centuries. The development of water meadows at Strathallan, Bertha and Glendevon has received a degree of study (Fraser [2001](#)). However, more research is needed into the wider use of irrigation in the region.

### *Research Priorities*

PKARF Agenda 8.8: Identifying former areas of marsh and other wetlands in Perth and Kinross.

PKARF Agenda 8.9: Enhancing understanding of how wetlands, and people’s relationship to them, changed over the post-medieval period.

PKARF Agenda 8.10: Greater study of post-medieval drainage projects and their relationship to processes of ‘improvement’.

PKARF Agenda 8.11: Seeking a greater understanding of other aspects of water management including water meadows.

### *Research Questions*

PKARF Qu 8.17: Which areas of Perth and Kinross were wetlands before the 19th and 20th centuries?

PKARF Qu 8.18: How were wetlands used and managed during the post-medieval period?

PKARF Qu 8.19: When and how were former wetlands drained?

PKARF Qu 8.20: What can we discover about the history and exploitation of the Tay reedbeds?

PKARF Qu 8.21: How did the biodiversity of wetlands change as a result of human action?



PKARF Qu 8.22: What was the impact of water meadows and other forms of irrigation?

### 8.2.4 Rural Settlement

The post-medieval period saw major disruption to traditional settlement patterns in Perth and Kinross. A combination of agricultural improvement, industrialisation and changing attitudes to land tenure meant the 18th and 19th centuries saw many older settlements being abandoned, while other locations experienced unprecedented levels of development. It is therefore important to recognise that the rural settlement patterns of today, or indeed the late 19th century, may differ significantly from those of the 17th and early 18th centuries.

Early maps provide a partial window onto the distribution of pre-improvement settlements. Well-known resources such as the maps created by [Joan Blaeu](#) and [John Adair](#), as well as William Roy's detailed [military survey](#), still have potential for further study. However, many less famous collections of estate plans also survive for this period. Work in the Ben Lawers area of Loch Tayside has highlighted the significant research possibilities such estate plans can hold (Atkinson [2016](#)). In the 2000s a major map regression exercise was undertaken for Ben Lawers which compared survey information from the RCAHMS, OS map data and 18th-century maps created by John Farquharson for the Breadalbane estate (Boyle [2009](#)). This revealed a complex pre-improvement landscape of multiple tenancy townships, with infield and outfield, and upland summer grazing. This was a pattern of land use and settlement which was largely swept away in the 1790s with large sheep walks and the creation of single tenancy farms. Similar evidence survives for many other estates in Perth and Kinross, but usually has not received the same, or sometimes any, degree of study.

The nationwide First Edition Survey Project made a major contribution to our understanding of post-medieval rural settlement in Perth and Kinross (RCAHMS [2002](#)). This project mapped buildings recorded as unroofed on the first edition of the Ordnance Survey – thereby providing an overview of the distribution of abandoned settlements visible in the mid-19th century. However, inconsistencies in how sites were recorded by the Ordnance Survey teams has resulted in issues with the data. For example, former shielings – traditional seasonal shelters for upland herders – were not always noted by the Ordnance Survey, whilst some sites identified by them as shielings may in reality have been the remains of small permanent settlements. If studied in isolation, maps have the potential to distort our understanding of post-medieval settlement patterns,

and under-represent some, often lower status, types of sites. Despite the obvious value of historical maps, it is vital that the information they provide is compared with evidence from modern field survey.



Blaeu's map of Loch Tay, 1654 © National Library of Scotland

In recent decades there has been significant survey work regarding rural settlement in Perth and Kinross. However, the degree of study has varied between different parts of the region. The RCAHMS previously surveyed much of the eastern area of Perth and Kinross (RCAHMS [1990](#); [1994](#)). Meanwhile, our understanding of a small, and possibly exceptional, part of the north-west of the region has been greatly enhanced by the Ben Lawers Historic Landscape Project (Atkinson [2016](#)). However, most of the north-west remains relatively unstudied, and deserves much greater investigation through aerial and field survey. Currently, the overall lack of field survey in the northern and western areas of Perth and Kinross may be significantly skewing our understanding of post-medieval settlement.



Surveying at Tomour and Croftvellich in 2002 © HES



At present, it seems as though the varying landscapes of Perth and Kinross strongly influenced pre-improvement settlement patterns. Map evidence from the 17th and 18th centuries indicates that in upland areas most settlements were traditionally located along loch shores or beside rivers. The majority of these upland settlements were quite small and consisted of dispersed townships and farms. In contrast, in lowland areas there appears to have been greater variety in the size of settlements, and they were more generally distributed across the countryside, rather than being restricted to the strips of land around significant watercourses.

Only a tiny proportion of these rural settlements have been excavated. The Ben Lawers Historic Landscape Project led to several excavations in the area around Loch Tay, and revealed many of the challenges associated with studying pre-improvement upland communities (Atkinson [2016](#)). Post-medieval settlements excavated include [Balnasuim](#) (MPK9430), [Croftvellich](#) (MPK9467), and [Easter Tombreck](#) (MPK9433, all in north Loch Tayside). Interestingly, despite their geographic proximity, the pre-19th-century buildings at these sites ‘exhibited no consistency in form’ and even had differing construction techniques (Atkinson [2016](#), 128).

The factors that drove this variety are at present unclear. The Ben Lawers excavations highlighted the difficulty of dating rural settlements in upland Perth and Kinross prior to the late 18th century, when significant quantities of mass-produced goods began to enter the region. In particular, the excavations produced very few 17th and 18th-century ceramic fragments, and it is possible that some upland communities in Perth and Kinross were largely aceramic prior to the 1790s (Atkinson [2016](#), 262).



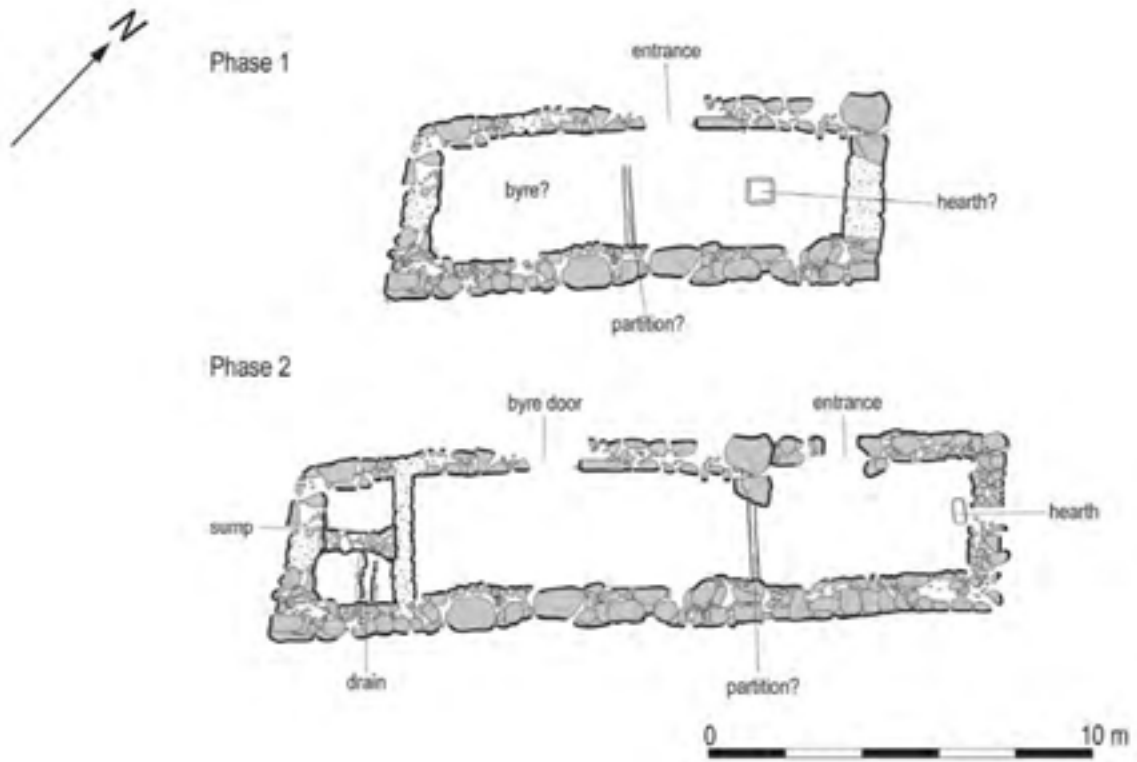
Excavation of post medieval building at Balnasuim © GUARD Archaeology Limited

The Ben Lawers project saw the excavation of several shielings along the Lawers Burn and the Edramucky Burn (Atkinson [2016](#), 213–46). Radiocarbon dating for the [Edramucky](#) shielings (MPK174) indicated use during the 16th or 17th centuries, while shielings at [Meall Greigh](#) (MPK214) on the Lawers Burn produced two phases of date ranges, one spanning the 15th to the 17th century, another suggesting activity in the 18th or 19th centuries. Relatively little material culture has been discovered at shielings – although ‘shaped stone discs’ have been found (Atkinson [2016](#), 240, 246).

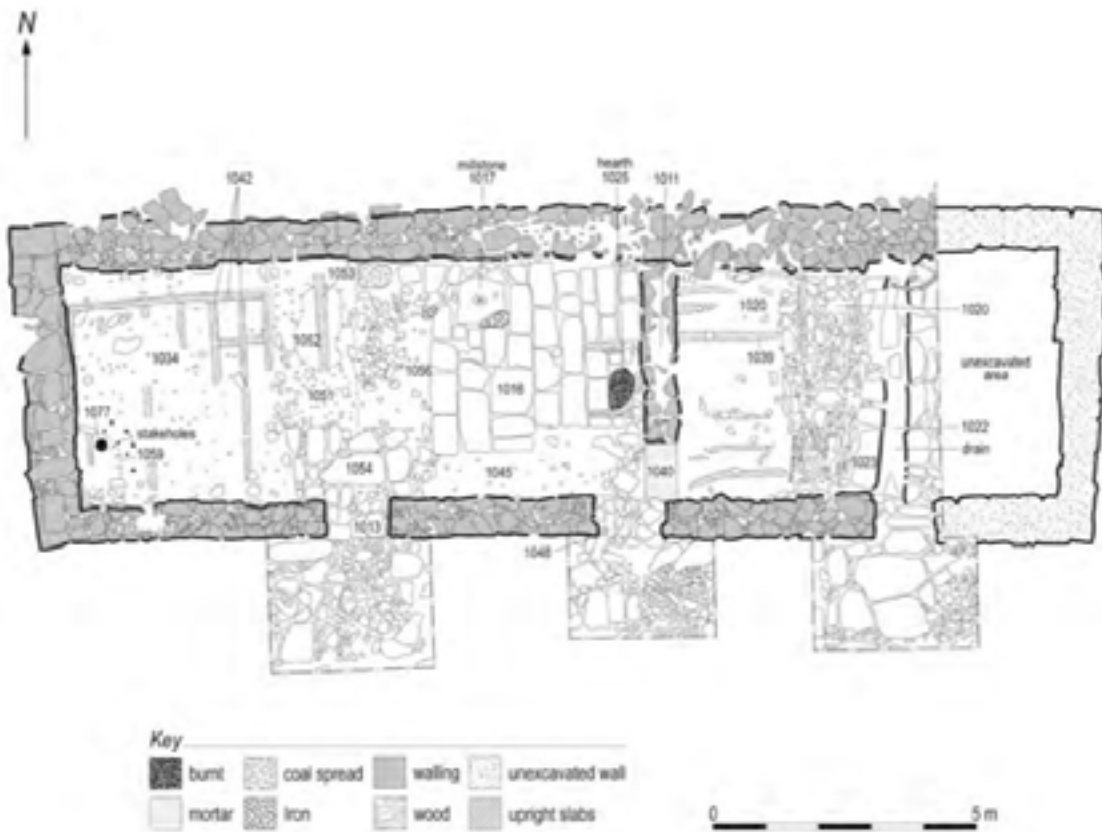
These have sometimes been interpreted as weights for pressing cheese curds, although this theory is not universally accepted. As shielings form one of the most common monument types in upland Perth and Kinross, there is a clear need to better understand their diverse designs, construction techniques, chronology, usage and seasonality. Whilst some initial work has been carried out on place names associated with transhumance, such as shiel, airigh, ruighe and bothan, the broader extent and experience of transhumance in post-medieval Perth and Kinross requires further research (Bil [1992](#)). A particular area of debate relates to the permanence, or otherwise, of shielings. It should perhaps be noted that at some sites there is evidence of shielings shifting from seasonal into year-round occupancy as the land improved with the creation of pasture and frequent manuring (Bil [1990](#)).



Excavation at Easter Tombreck © GUARD Archaeology Limited



Plan of phasing at Balnasuim © GUARD Archaeology Limited



Plan of building at Balnreich crofting settlement © GUARD Archaeology Limited

The exceptionally disruptive nature of agricultural improvement in the Highlands means that upland Perth and Kinross has large numbers of abandoned settlements. Stewart was something of a pioneer in excavating such sites, and has left a legacy of assemblages and sites that could be reassessed, notably at Allt na Moine Buidhe and Allt Lochan nan Losgunn (Stewart et al [1999](#)). In contrast, post-medieval sites in lower lying parts of the region have more frequently experienced continuous occupation. This obviously creates challenges for excavation. However, lowland areas often have relatively detailed post-medieval documentation and are more likely to have standing buildings from the 17th, 18th and 19th centuries. Ongoing changes in rural communities, and in particular the trend for converting and developing historic farms, may provide opportunities for excavation and detailed recording of standing buildings. There is arguably a need for greater discussion between planners, researchers and local communities about how we can best use this window of opportunity for archaeological investigation. If we do not rapidly identify research priorities for lowland rural settlements, there is a risk that a whole swathe of evidence regarding post-medieval agricultural life will be destroyed before it is properly understood.

### *Research Priorities*

PKARF Agenda 8.22: Greater recording of well-preserved post-medieval farms and of farms where there is a high likelihood of reused materials.

PKARF Agenda 8.23: Further excavation and dating of shielings.

PKARF Agenda 8.24: Comparison of the experiences of 'direct' and 'indirect' clearance.

PKARF Agenda 8.25: What was the comparative experience of "lowland" and "highland" rural depopulation?

### *Research Questions*

PKARF Qu 8.32: To what extent can we use estate maps and papers to identify pre-improvement settlements?

PKARF Qu 8.33: What can we discover about the longevity, functions, and material culture of shielings?

PKARF Qu 8.34: What factors drive the abandonment of settlements? To what extent can we identify reasons for abandonment in the archaeological record?

PKARF Qu 8.35: What can historic building recording of well-preserved, altered and unaltered farmsteads tell us about rural settlement?

PKARF Qu 8.36: What can the study of farms built on earlier sites tell us through, for example, reused masonry reused masonry / date stones etc.?

PKARF Qu 8.37: Are there distinctive landscape features, such as stone dykes, which could form the basis of regional studies which aim to identify local variations?

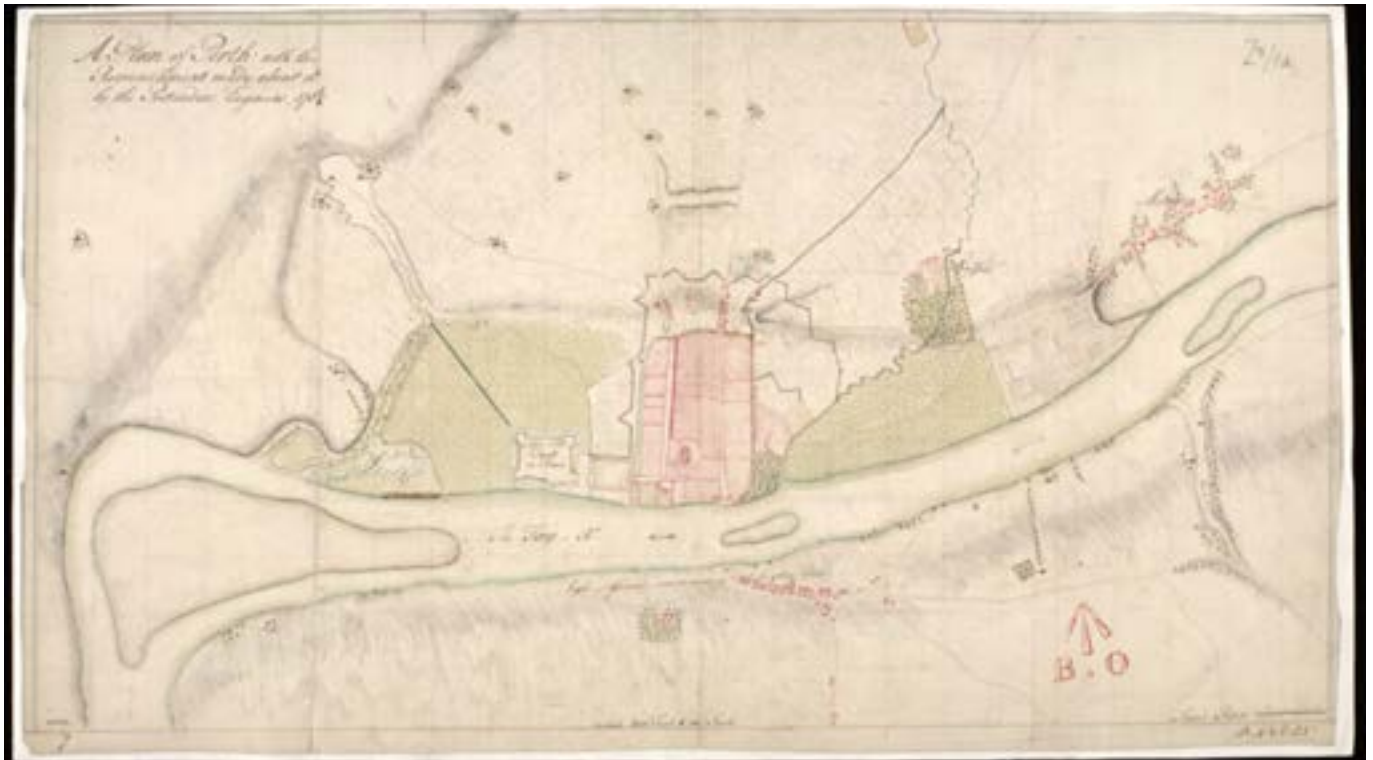
PKARF Qu 8.38: How does the range and quantity of material culture compare across rural and urban settlements?

## 8.2.5 Urban Settlement

Perth and Kinross was, and is, less urbanised than many other regions in eastern Scotland. The burgh of Perth was by the far the most significant post-medieval urban settlement, and at the start of the 17th century already had a lengthy history of occupation. In the late 17th century, Perth had about 4,000 residents (Whatley [2011](#), 42). The number of inhabitants increased over the course of the 18th century, and by the 1790s the burgh had a population of about 19,000. This rate of expansion was 'average' for a Scottish town of the period (Whatley [2011](#), 42). Perth's medieval street plan provided the framework for the post-medieval burgh, and still influences the townscape today. However, alterations were made to the burgh's layout in the 18th and 19th centuries.

There were significant new developments on the outskirts at this time, meanwhile the construction of [Smeaton's Bridge](#) (MPK3405) led to a redesign of the street plan in the north-eastern section of the historic burgh and the creation of what is now George Street. This reordering can be traced in historic maps, including a series by the Board of Ordnance engineers [Lewis Petit](#) and [William Horneck](#) (carried out in 1715–16) and [Archibald Rutherford's](#) iconic map of 1774, which shows relatively limited expansion beyond the boundaries of the medieval burgh. Later growth beyond the medieval boundary is charted through the maps of [Robert Reid](#) (1809) and [John Wood](#) (1823), before the [Ordnance Survey maps](#) begin in 1859/1860.





Map of Perth circa 1715-1716 by Lewis Petit © National Library of Scotland

The 18th and 19th centuries saw major changes to Perth's architecture, and a number of medieval and 17th-century structures were swept away at this time. When Thomas Pennant visited Perth in 1769, he remarked that the burgh was 'in general well-built' although 'in some of the lesser [streets] are yet a few wooden houses in the old style; but as they decay, the magistrates prohibit... rebuilding them in the old way' (Pennant [1772](#)). This period of 'improvement' has attracted a degree of historical attention, but more investigation of the physical evidence for the processes by which change was implemented would be beneficial (McKean [2011](#)).

Further study of the significant public buildings constructed in Perth during the post-medieval period would likewise be desirable, with many of these structures still surviving. However, a proportion have been demolished and interdisciplinary research into these lost buildings could prove illuminating. A particularly notable loss was the late 17th-century [tolbooth](#) (MPK8697) which stood at the east end of the High Street, and was dismantled in the 1870s (Bowler [2004](#), 23). The tolbooth was replaced by Victorian Gothic [council chambers](#) (MPK10276) which continued to be used for municipal purposes into the 21st century.



Perth Council chambers © HES

Mention should also be made of the increasing 18th and 19th-century efforts to provide utilities such as clean water, sewers and street lighting. Of particular note is the remarkable former [Perth Waterworks](#) (MPK3453), its impressive classical architecture arguably indicating the status that the provision of utilities was accorded in the 19th century. Water supply became a particularly pressing public health issue as towns grew. In Perth the sand filters of an island and steam engines were initially used pump water into the town (Cameron [2007](#)).

In the later 19th and 20th centuries, the introduction of iron pipes allowed the use of gravity to bring water from reservoirs over greater distances. Greater study of the evolution of water and sewage arrangements in the region's urban settlements would be desirable. During the 19th century, gas works also existed in many towns. These structures have been largely demolished in Perth and Kinross. However, Historic Environment Scotland has British gas records for a number of these sites, and interdisciplinary study of this aspect of the region's past might be beneficial. Greater recording and study of the smaller structures associated with utilities in Perth and other urban settlements also needs to be undertaken.



Perth Waterworks © HES

Archaeological research into the experience of the less affluent residents of Perth should be another priority as, unsurprisingly, the poor and marginalised are much less well-represented in written evidence. As a burgh which underwent moderate urban growth during the 18th and 19th centuries, Perth provides an interesting comparison to the incredibly rapid expansion of cities such as Glasgow and Edinburgh. It is not at present clear how industrialisation and the creation of a consumer society impacted working-class living standards in places such as Perth, so many

of our models for this period of change are based on rather different urban communities.

Perth and Kinross also had several smaller urban centres, like Aberfeldy, Dunkeld, Crieff and Coupar Angus. Despite the good work undertaken by the Scottish Burgh Surveys at the latter, these smaller towns deserve far more historical and archaeological research (Dennison and Coleman [1997](#)). Many of these communities are currently undergoing significant development, and when opportunities arise for archaeological intervention, they should be seized. The 17th, 18th and 19th centuries are critical to understanding the evolution of the region's smaller towns. Excavation and recording of standing buildings are likely to be key to enhancing our knowledge of many aspects of post-medieval architecture and daily life in this second tier of urban communities.

### *Research Priorities*

PKARF Agenda 8.30: Greater study of the smaller burghs in Perth and Kinross.

PKARF Agenda 8.31: Identifying evidence about post-medieval urban life in the findings from the extensive excavations in the burgh of Perth.

PKARF Agenda 8.32: Study of remains associated with the provision of utilities (e.g water supplies, gas).

PKARF Agenda 8.33: More detailed study of commercial premises.

PKARF Agenda 8.34: There is potential to engage with the contemporary through archaeological and interdisciplinary approaches.

### *Research Questions*

PKARF Qu 8.44: What can we learn about smaller urban centres in Perth and Kinross during the post-medieval period?

PKARF Qu 8.45: What does the archaeological record reveal about the growth of the burgh of Perth during the post-medieval period?

PKARF Qu 8.46: What impact did industrialisation have on the standard of living of urban working class households?

PKARF Qu 8.47: Can substantial lengths of wooden water/gas pipes contribute to tree-ring chronologies?

PKARF Qu 8.48: How do shop premises evolve over the course of the 17th, 18th and 19th centuries?

PKARF Qu 8.49: How best can contemporary archaeology contribute socially in the area?

### 8.2.6 Country Houses and Estates

The country houses of the gentry and aristocracy, and their associated designed landscapes, profoundly influenced the economy and environment of post-medieval Perth and Kinross. Almost all of the surviving great houses from the post-medieval period are listed buildings and hence enjoy a degree of protection not always afforded to less high-status structures. However, the extent of research that has been undertaken into these properties varies considerably.

The Historic Environment Record notes 197 country houses in Perth and Kinross. Many of these sites have experienced successive phases of development, which can at times create challenges for researchers. The post-medieval period saw major changes to the plan, construction and style of elite residences. In the early 1600s tower houses were still the commonest form of elite home in Perth and Kinross, and 62 late medieval and post-medieval tower houses are listed in the region's Historic Environment Record. However, by the late 17th century a more 'classical' aesthetic was becoming increasingly popular. [Kinross House](#) (MPK3039), which was built in the 1680s, was one of the earliest examples of the new classical style in the region. Indeed, by the 18th century Kinross House was praised as 'the first good house of regular architecture in North Britain' (Pennant [1772](#)). Broadly classical designs held sway until the 19th century when there was a conscious revival of elements of the traditional vernacular with the construction of so-called 'Scottish baronial' houses.



Kinross House © HES

Most of the post-medieval country houses in Perth and Kinross have had limited physical investigation. This is partly because a large proportion of these sites are still used as residences or hotels. Some of

the region's privately owned properties also function as heritage attractions, as is the case with [Scone Palace](#) (MPK5473), but many are not open to the public. Conservation and building work provides opportunities for the physical investigation of properties which are usually occupied. For example, a degree of study of Kinross House was undertaken when it was converted from a family home into a hotel in the early 2010s (Uglow et al [2012](#)).

However, landowners and heritage professionals could have greater dialogue about what forms of investigation might take place outwith the brief window posed by major construction work. More use could also be made of the extensive textual and visual documentation held in public archives and family collections. Elite houses in the post-medieval period often produced large quantities of financial records, correspondence and plans, the majority of which remain largely unstudied. Significant and underutilised collections of estate papers from the region are held in Perth and Kinross Archive, the National Records of Scotland and the National Library of Scotland.

Recent decades have seen the subdivision of some country houses, such as [Arthurstone House](#) (MPK6809), into smaller apartments, often bringing about significant changes to interior features. In this context it should perhaps be noted the value of recording, and where possible preserving, both grand reception rooms and less high-status spaces such as service quarters. There are also a number of post-medieval country houses in Perth and Kinross which have been wholly or partially demolished, sometimes to be replaced by newer residences near the same site. At least 50 demolished country houses have been identified in the old county of Perthshire (Robertson and Robertson [2017](#)). A few properties have undergone repeated demolition and rebuilding, such as [Dupplin Castle](#) (MPK1876). It was destroyed during conflict in the 1460s, almost entirely remodelled in the 1680s, destroyed by fire in the 1820s, damaged by another fire in the 1920s and was demolished again in the 1960s. Finally, a smaller country house was built on the same site in the 1970s.

Study of the partial remains of the region's demolished great houses, and their surroundings, has been limited. Many of the earlier examples of these lost residences are recorded on the maps of Timothy Pont and Joan Blaeu and greater documentary and physical study of these sites would be desirable. In particular, more attention should be paid to the residences of minor lairds. The excavation of a small 17th-century laird's house at [Blarmore / Carwhin](#) (MPK9440) demonstrated the considerable insights that physical investigation



of less high-profile gentleman's residences can bring (Atkinson [2016](#), 109–26). Currently, 13 sites in the region are categorised as laird's houses in the Historic Environment Record. This is almost certainly an under-estimate of the number of buildings of this type which formerly existed.



Laird's House at Blarmore © HES

Traditionally, popular and scholarly attention tended to focus on the architecture and furnishings of the great houses themselves. However, the late 20th century saw an increasing interest in the landscapes which surrounded them, which— triggered the creation of what is now the *Inventory of Gardens and Designed Landscapes* maintained by Historic Environment Scotland (HES). No fewer than 41 sites in Perth and Kinross are registered in the inventory, most of which are post-medieval in date. Perhaps the most significant of these designed landscapes is the garden and park at [Drummond Castle](#) (MPK5822; [GDL00144](#); [LB19883](#)), near Crieff. Gardens were recorded at Drummond Castle in the medieval period, but most of what we see today was created in the 17th, 18th and 19th centuries. It includes what HES describes as 'the best example of formal terraced gardens in Scotland' (Brown [2012](#), 191; Historic Environment Scotland [1987](#)). However, the *Inventory of Gardens and Designed Landscapes* only records the most 'significant' sites and as a result tends to focus on the grandest properties.

There are in Perth and Kinross numerous smaller gardens and parks associated with lairdly residences which have received only the most cursory study and have negligible legal protection. Greater research into more modest designed landscapes should be a priority. Specific landscape elements, and their

relationship to estate management and functioning, need more assessment and analysis. For example, analysis of the ice houses of the Invermay, Dupplin Castle and Monzie Castle estates highlighted their essential role in facilitating a reliable food supply to a large household (Cox [2004](#)). Other less obvious landscape features may have also played important practical roles.



Drummond Castle © HES



Ardoch Ice House © HES

Even more so than houses, successive generations tend to redesign their gardens and evidence of earlier garden features can often be discerned in the midst of later landscaping schemes. For instance, partially demolished 17th-century terraces are evident in the later lawns at [Monzie Castle](#) (MPK846) (Brown [2012](#), 166). Much more extensive recording and physical study of such features is required, especially since gardens are often continually redesigned. Very few post-medieval gardens in Perth and Kinross have seen archaeological excavation.

An exception to this pattern is Kinross House beside Loch Leven, where a walled garden a little distance from the house was excavated around the start of this century (Cox [2002](#)). A helpful overview of the cartographic and written evidence for the most notable Scottish lost gardens has recently been provided by the work of Brown ([2012](#)). However, there is a need for more in-person survey work, which will ideally bring a greater understanding of the dating, evolution and use of many of these past designed landscapes.



Monzie Castle © HES

### *Research Priorities*

PKARF Agenda 8.26: More interdisciplinary study of surviving country houses including an understanding of their uses of material culture.

PKARF Agenda 8.27: Identification of the locations and remains of lost country houses.

PKARF Agenda 8.28: Further research into the houses of lesser lairds, including their material culture.

PKARF Agenda 8.29: Far greater study, including excavation where appropriate, of post-medieval designed landscapes.

### *Research Questions*

PKARF Qu 8.39: How can we best study country houses which are still occupied?

PKARF Qu 8.40: What can we learn about 'lost' country houses in Perth and Kinross?

PKARF Qu 8.41: To what extent did elite architecture in Perth and Kinross reflect wider national and international trends?

PKARF Qu 8.42: In what ways did regional trends and vernacular architecture influence elite buildings?

PKARF Qu 8.43: How did gardens and designed landscapes evolve in Perth and Kinross over the post-medieval period?

### 8.2.7 Building Traditions

There appears to have been considerable diversity in the vernacular architecture of Perth and Kinross. A range of building materials, including stone, wood, turf, clay, thatch and slate, were widely used across the region throughout the period. There was also significant variety in the ground-plan of many of the post-medieval dwellings and work-spaces in Perth and Kinross. Some recording of vernacular buildings, both standing and ruined, was undertaken by the RCAHMS, particularly in their surveys of the eastern parts of the region (RCAHMS [1990](#); [1994](#)). However, much more research into vernacular building traditions, including detailed analysis of materials and construction techniques, should be a priority. Historic building recording in advance of development, demolition or conversion may be able to contribute further to this. In particular, there should be a focus on recording and analysing the types of vernacular buildings which are characteristic of the region, such as cruck-framed longhouses, the clay 'biggins' (buildings) of the Carse of Gowrie, horse engine sheds, watermills and fishing bothies.

A combination of development pressure, poor maintenance and increasingly extreme weather conditions means that a significant proportion of the region's vernacular structures are potentially at risk. Even buildings in the care of heritage organisations can suffer damage and deterioration, such as at [Cottown Old Schoolhouse](#) (MPK6037; Cox [2006](#)). This significant clay building is in the care of the National Trust for Scotland, which has faced considerable challenges with the property's maintenance since it was severely flooded in 2011. Other clay buildings in the region may also be vulnerable to the growing prevalence of extreme weather. The Tay Landscape Partnership recorded 147 earth buildings on the Carse of Gowrie with a view to promoting their conservation ([2018a](#) and [2018b](#)).



However, further recording and study of these potentially fragile structures would be helpful. Alongside the use of mudwall as a geographically focused tradition, the use of earth for plaster, floors and mortars was widespread throughout the region. Traditional earth floors are now especially rare and merit documentation and protection, whilst earth mortars are the subject of ongoing research by Historic Environment Scotland. Both were common at the start of the post-medieval period but very rare by the end; this reflects the transition from local natural materials to commercial industrial construction products.



Cottown Old Schoolhouse © HES

The 18th and 19th centuries saw major changes to the design and construction techniques used in many buildings in Perth and Kinross. There was a conscious effort, particularly in urban areas and on great estates, to construct buildings which fitted with contemporary expectations of ‘polite’ architecture. To this end an increasingly classically influenced style was adopted, which made much greater use of symmetry and ashlar masonry. Sash windows were also perceived as an essential element in this new style of building. Perth saw especially large-scale redevelopment along these lines. In the 1820s, it was noted that much of Perth had ‘recently been rebuilt and the streets improved and embellished by the erection of handsome modern houses’ making it ‘the neatest and most regular built town in Scotland’ after Edinburgh’s New Town (Wood [1828](#), 298). Substantial numbers of buildings from this period survive, and most are still used as residential or business properties (McKean [2011](#)). More study of these 18th- and 19th-century standing buildings would be desirable, although the extent of physical intervention is likely to be limited by the fact they are mostly still occupied. Perth also retains significant

well-preserved historic shopfronts (Lennie [2008](#)). Further historic shop frontages survive in places such as Aberfeldy, Auchterarder, Dunkeld and Blairgowrie. These are worthy of recording and study, especially as changing fashions in store design mean that shop frontages often undergo relatively frequent alterations.



Camserney Farm cruck frame house © HES

### *Research Priorities*

PKARF Agenda 8.35: Improved understanding of vernacular architecture in Perth and Kinross during the post-medieval period.

PKARF Agenda 8.36: Greater application of dendrochronology to the region’s standing buildings.

PKARF Agenda 8.37: Study of the use of earth mortar in the region.

PKARF Agenda 8.38: Study of the interaction between ‘polite’ and vernacular architecture.

PKARF Agenda 8.39: Study of the extensive Victorian and Edwardian cast iron railings on domestic properties in Blairgowrie.

### *Research Questions*

PKARF Qu 8.50: What can the recording and analysis of specific materials, including lime and earth mortars, turf, thatch, and corrugated-iron tell us about the rich and varied vernacular architecture of the area?

PKARF Qu 8.51: What can dendrochronology reveal about building traditions in Perth and Kinross?

PKARF Qu 8.52: What buildings should be prioritised for dendrochronological study?



PKARF Qu 8.53: Earth mortar is increasingly being recognised in built heritage. How widespread was its use in the region?

PKARF Qu 8.54: Earth mortars are currently the subject of a HES-funded study by Arc Architects – can the resultant database be of use for archaeologists to sample?

PKARF Qu 8.55: What was the impact of new ideas about ‘polite’ architecture on buildings in the region? How did new ideas interact with vernacular traditions?

PKARF Qu 8.56: What examples of vernacular architecture survive?

PKARF Qu 8.57: Can we find remains of earlier vernacular architecture on the backs and interiors of buildings with seemingly ‘Classical’ frontages?

PKARF Qu 8.58: To what extent were new ideas about building design in the 18th and 19th centuries externally imposed?

PKARF Qu 8.59: What can the detailed study of the Victorian and Edwardian cast iron railings of Blairgowrie and elsewhere tell us about the use of cast iron in the period?

## 8.3 Daily Life

### 8.3.1 Agriculture and Diet

The post-medieval period was characterised by major changes to agriculture in Perth and Kinross. In particular, upland areas saw an ending of traditional patterns of transhumance and subsistence farming. Instead, upland parts of Perth and Kinross became increasingly dominated by sheep farming and the management of land for deer and other game. This brought major alterations to upland landscapes, including the loss of traditional small fields ‘laid out for meadow hay’ and corn-fields rising ‘to a considerable height on the face of the highest mountains’ (Campbell [1802](#), 207). The move away from cattle farming in upland areas also had an impact on soil quality, as cows no longer broke up and dunged the earth.

The foundations for the reordering of agriculture in Perth and Kinross, and many other parts of Scotland, were laid in 1695 by legislation allowing local landowners to divide up common land, also known as commonties. The Scottish legislation on commonties differed significantly from the English laws on enclosure, and gave fewer rights to the tenants who already used common lands (Richards [2008](#)). This paved the way for about half of the common land in Scotland to be claimed by private landowners –

with major consequences for the viability of upland subsistence farming.

Traditionally, whilst common land was not cultivated, it was a valuable source of fuel, some seasonal foods and grazing for the animals of local tenants. The conversion of common lands to private ownership enabled landlords to restrict access and change the use of these areas (Callander [2003](#)). It is possible that in Perth and Kinross the subdivision of common land was not originally intended as a way to move people, but by affecting the ability of local residents to practise subsistence farming it contributed to the abandonment or contraction of many upland settlements. There is some evidence of direct clearance of settlements in Perth and Kinross during the 18th century, but in the main the transformation of the region’s farming patterns seems to have been accomplished by economic pressure rather than by force (Richards [2008](#)). Yet the consequences were still profound. When travelling near Loch Tay around 1800, Alexander Campbell commented that ‘an epidemic madness for sheep-grazing seems to rage’ before sadly reflecting that ‘the country has become desolate, and almost drained of its native inhabitants’ (Campbell [1802](#), 195).

The trend away from transhumance and subsistence farming in upland zones was reinforced by the decision of some major landowners, including the Duke of Atholl, to create much larger single tenancy farms. This had a major impact on land use and settlement patterns in areas such as Ben Lawers in the late 18th and early 19th centuries (Boyle [2009](#)). The Ben Lawers Landscape Project used field survey, excavation and written evidence to gain a detailed insight into the processes by which agriculture was transformed near Loch Tay (Atkinson [2016](#)). Similar projects for other parts of Perth and Kinross would be desirable. In particular, there is a need for more research into early and mid-18th-century patterns of improvement and clearance. For example, there is evidence that in the 1740s and 1750s the Commissioners of Forfeited Estates undertook major changes in the Rannoch area. Interestingly this included the clearing of traditional subsistence farmers to make way for cattle, rather than the sheep which characterised many later efforts at improvement (Stewart [1929](#)).



Surveying at Barmore © GUARD Archaeology Limited

It should be noted here that although the word 'improvement' was widely used in contemporary records, it is a loaded term. The notion of 'improvement' arguably underplays the negative aspects of this process of transformation, including the loss of biodiversity. Further, it implies that previous agricultural regimes were in need of improvement, and were bettered by the alterations of the 18th and 19th centuries. Similarly, the term 'clearance' is arguably a euphemistic way to describe often traumatic changes to rural patterns of settlement and landholding. As a result, both 'improvement' and 'clearance' are increasingly being seen as problematic terms, and further discussion about the appropriate terminology for these processes of change would be desirable.

Much more research is also needed into the impact of the agricultural revolution and the processes of so-called 'improvement' in lower lying areas of Perth and Kinross. Although the redrawing of settlement patterns seems to have been less extensive in the lowlands than in the uplands, the post-medieval period still saw major changes to farming. According to Alexander Campbell, the final years of the 18th century saw significant 'improvement in agriculture along the whole course of the Tay, but especially around Perth'. Campbell claimed that in the ten years before he visited the area the value of the land had 'risen to a degree hitherto unparalleled', a development he attributed to 'well-directed knowledge with regard to soil, mode of culture, and management' (Campbell [1802](#), 348).

Written records provide considerable insights into farming practices in the area around the Tay. For example, the minister of St Madoes in the 1790s noted that 'wheat, barley, oats, clover, grass, pease and beans' were the 'ordinary crops' in his parish, 'together with a small quantity of potatoes and

flax', which were typically rotated 'pretty nearly' in line with 'the most approved method of agriculture' (Black [1792](#), 571). The minister also remarked that there was very little pasture in the area and that the 'horses and cattle are chiefly fed within doors'.

More systematic study of written records, including estates papers and the *Statistical Accounts*, combined with physical evidence might significantly advance our understanding of how agriculture evolved in Perth and Kinross during the post-medieval period, and the diversity of practices between different localities.

Partly enabled by the rising profitability of the land, the 18th and 19th centuries saw the construction of numerous new agricultural buildings – many of which still stand today. Among other structures, farmers often constructed horse-gins, distinctive circular buildings designed to house horse-driven machinery, and a significant number of these structures have been recorded in the region (Hume [1977](#)). These were sometimes added to existing threshing barns which had opposing doors. The circular type resulted from the use of small Perthshire slates on sarking, unlike the octagonal pantiled form on battens favoured in Fife and the Lothians. Current pressures on farming, and much larger farm machinery, mean that a considerable proportion of agricultural buildings may be vulnerable to dereliction, destruction or conversion in the near future. Careful recording of post-medieval farms in the region should be a priority. It would also be desirable to see more recording of field boundaries and other land features likely to be removed during the amalgamation of older fields into larger units.



Lornty Farm threshing mill © HES

Perth and Kinross has a long tradition of fruit growing, particularly in the area around the River Tay. There are records of orchards in the Carse of

Gowrie during the Middle Ages. The post-medieval period saw an expansion in fruit growing and efforts to cultivate new varieties. It has been suggested that the ‘most productive’ period for orchards in the Carse of Gowrie was during the late 18th and early 19th centuries (Hayes [2008](#), 5). By the 1880s, the orchards by the Tay were already struggling to compete with imported fruit, and further decline took place during the 20th century. There has been some recent research into orchards in the Carse of Gowrie (Hayes [2008](#); Hall [2010](#)). However, more investigation would be desirable, particularly as a combination of poor maintenance and development pressures mean that few of the remaining orchards are likely to survive in the long term. Study of fruit growing in other parts of Perth and Kinross is likewise needed.

Overall, we need much more interdisciplinary research regarding food and drink in post-medieval Perth and Kinross. Written records suggest that by the 18th century the diet of the gentry in Perth and Kinross was increasingly aligned with that of people of a similar rank in other parts of Britain. For example, a dinner at Dunkeld in 1727 featured dishes such as white fish, roast beef, pork ‘with claret and currant sauce’, minced pies and pasties, as well as five bottles of brandy, 38 bottles of claret and a considerable quantity of ale (Anonymous [1798](#), 443–4). Greater understanding of the diet of the region’s elites in the 17th century, and whether this was more distinctively regional, would be of interest, as would study of the food and drink consumed by less affluent households throughout the post-medieval period.

In general, post-medieval food archaeology is a surprisingly neglected topic, with many studies of diet in this era disproportionately focusing on written evidence. This phenomenon is not unique to Perth and Kinross but is a wider British trend (Thomas [2015](#), 188–9). Yet there is a growing awareness that archaeology can make a valuable contribution to our understanding of food production, processing, preparation and consumption in even the relatively recent past. In particular, archaeological approaches can enhance our knowledge of living standards and patterns of consumption in less privileged communities where written records may be more patchy (Newman and McNeil [2007](#)). However, even where documentary sources for food survive, archaeological approaches may broaden our understanding of post-medieval diets. Recent interdisciplinary research on 19th-century England suggests that ‘neither documentary nor archaeological evidence can individually provide a complete picture of food consumption’ (Thomas [2015](#), 206). To gain a more nuanced overview of the diets of the post-medieval residents

of Perth and Kinross, we need more comparison of information from written sources with the evidence from ceramics, glassware, archaeobotany and animal and human remains.

### *Research Priorities*

PKARF Agenda 8.18: Greater investigation of pre-improvement agriculture in Perth and Kinross, (including the role of transhumance).

PKARF Agenda 8.19: Study of the impact of ‘improvement’ on agricultural practice in different localities

PKARF Agenda 8.20: Interdisciplinary study of elite diets during the 17th century.

PKARF Agenda 8.21: Interdisciplinary investigation, (including evidence from excavation,) of the diets of less affluent households in the region.

### *Research Questions*

PKARF Qu 8.29: What types of crops were grown in different parts of Perth and Kinross? How did the varieties and types of crops alter over the course of the post-medieval period?

PKARF Qu 8.30: What role did transhumance play in pre-improvement Perth and Kinross?

PKARF Qu 8.31: To what extent is there evidence for a growing mechanisation of agriculture (e.g. threshing machines: where and when did they arrive)?

## 8.3.2 Hunting and Fishing

### **Hunting**

Hunting was already a highly regulated activity in Scotland at the start of the post-medieval period. Legal restrictions on hunting were further tightened over the course of the 17th and 18th centuries – out of a mix of environmental concerns and a desire to keep certain forms of game as an elite privilege. The management of game has had a considerable impact on the landscape of Perth and Kinross, yet archaeological and historical investigation of this aspect of the region’s past has been patchy.

A number of deer parks appear to have been present in Perth and Kinross in the medieval period (Hall et al 2011). However, our understanding of the management of deer in the region during the 17th and early 18th centuries is limited, and interdisciplinary study of how deer and other game were managed during this period would be of interest. Estate papers, for example, may provide helpful insights into this topic. A number of 17th and 18th-century estates in Perth and Kinross such as [Errol Park](#) (MPK5382)



and [Scone Palace](#) (MPK5473) had parkland, but it is unclear to what extent these managed landscapes were primarily intended for the preservation of game.



Errol Park estate © HES

The 19th century saw a major expansion in various forms of shooting, including deer stalking. Deer forests were recorded at Blair Atholl and Comrie by the middle of the 19th century (Jarvie and Jackson [1998](#), 30). Although, it should be noted that the presence of red deer was mentioned on the Duke of Atholl's estates much earlier than this (Campbell [1802](#), 270). The growing popularity of shooting deer and other game led to significant areas of upland Perth and Kinross being maintained as moorland.

Shooting was not merely a recreation for local aristocrats, it rapidly became a source of income for landowners. There is evidence for the commercial leasing of grouse-shooting in the Ben Lawers area as far back as the 1820s (Atkinson [2016](#), 105). A number of hunting lodges were constructed during the 19th century, with surviving examples at places such as [Morenish Lodge](#) (MPK11702) and [Clunes Lodge](#) (MPK597). Further study of these buildings' architecture and origins would be of interest. Field survey has also revealed the existence of a number of, probably, 19th-century shooting stands, with a particular concentration on the moorland above Morenish. It is likely that many more largely unrecorded structures associated with shooting and game management exist in the region.



Morenish Lodge © HES

The renting out of estates for hunting and fishing was not only a significant source of income for landlords, it also helped foster the tourism industry and shaped transport infrastructure. The early railway station in Perth was a key point to which hunting and fishing parties were brought for onward transport by horse and cart, and later by motor vehicle. Perth consequently developed as a retail centre for supplying such activities. Further research into the wider networks supporting hunting activities might be beneficial.

Fox hunting does not appear to have enjoyed the same degree of popularity in Perth and Kinross as it did in the Borders or indeed Fife. However, there is some evidence for foxes being hunted with hounds in the area around Perth and Forteviot during the 19th and early 20th centuries (see, for instance, *Dundee Courier* 20 February [1924](#)). In more upland areas, the killing of foxes appears to have been primarily regarded as pest control and been achieved through a mixture of shooting and the use of terriers. Interdisciplinary research into the extent of fox hunting in lower lying parts of the region, and whether it impacted choices regarding land management, could perhaps be beneficial.

The study of non-elite hunting, both legal and illegal, is also worthwhile. It is likely that the removal of common rights in favour of private interests, and the often-associated reduction in wetlands and unmanaged moorland, had a significant impact on the hunting activities of less affluent rural residents. Written evidence suggests that the early 19th century saw a reduction in poaching. For instance, during the late 1830s it was noted that in the area around Crieff 'poaching was once very prevalent; but it is believed

that it is now on the decline’ (Fergusson [1845](#), 508). Comparison of physical and written evidence for illicit hunting might be valuable.

### Fishing

There are numerous written records regarding fishing in Perth and Kinross during the post-medieval period, including extensive unpublished evidence in the Perth burgh records (Perth and Kinross Archives B59 series). By the 1800s salmon fishing on the River Tay was regarded as ‘a valuable branch of trade’ and fish packed in ice were being sent to London and the Mediterranean (Campbell [1802](#), 347). Detailed historical research has been undertaken regarding salmon fisheries in the Tay in the late 18th and 19th centuries (Robertson [1989](#)). However, further research into the evidence for fishing on the Tay earlier in the post-medieval period would be desirable.

Salmon fishing also took place on a number of other rivers in the region, such as the River Earn and the River Tummel. The travel writer Alexander Campbell claimed at the start of the 19th century that salmon was ‘formerly’ caught in the Tummel by means of ‘wicker baskets, which were placed in the crevices of the rock’ (Campbell [1802](#), 263). Aside from the evidence of fish bones in middens, the archaeological record left by small-scale traditional fishing may be limited. However, the commercial fisheries of the 19th century made a significant mark on the landscape. Canmore notes the existence of 11 fishing stations and 15 fishing lodges in Perth and Kinross, although this is almost certainly an under-estimate. Several of these sites had narrow gauge railways to help load the salmon. Remains of small railways can be seen at the former fisheries at [Walnut Grove, Kinfauns](#) (MPK8700) and [Cairnie Pier, St Madoes](#) (MPK6894).



Railway remains at Cairnie Pier © HES

The use of nets for salmon fishing on the Tay continued into the late 20th century. As a result, we are arguably living through a critical period regarding the physical remains of this industry. Some of the former fishing stations have recently been converted

to other purposes, while others are increasingly derelict. Greater recording of the surviving physical evidence of fisheries in Perth and Kinross, and of local memories regarding this industry, should be a priority. Some initial oral history on net fishing was undertaken by the Tay and Earn Trust and the Fife Rural Partnership, but more work of this type, and efforts to compare people’s recollections with the surviving physical and documentary evidence, would be desirable (Fife Rural Partnership [2009](#)).

### Research Priorities

PKARF Agenda 8.12: Study of fishing in the region before the development of the commercial fisheries of the late 18th and 19th centuries.

PKARF Agenda 8.13: Improved recording of the physical remains of the commercial fisheries and of local memories about these sites.

PKARF Agenda 8.14: Understanding the dynamics of the commercial underpinning of the spread in sport fishing.

PKARF Agenda 8.15: Interdisciplinary research into hunting and the management of game, (especially deer,) during the 17th and 18th centuries.

PKARF Agenda 8.16: Increased recording of sites and structures associated with shooting and game management in the 19th and early 20th centuries.

PKARF Agenda 8.17: Explore evidence for the commercial infrastructure and networks which supported recreational hunting, (especially during the 19th century).

### Research Questions

PKARF Qu 8.23: What was the nature of fishing in the region before the late 18th century?

PKARF Qu 8.24: What physical remains can be found of early post-medieval fishing?

PKARF Qu 8.25: What physical evidence survives from the commercial fisheries of the 18th, 19th, and 20th centuries?

PKARF Qu 8.26: How was game, (especially deer,) managed in the 17th and 18th centuries? What traces have hunting and game management left behind in the landscape?

PKARF Qu 8.27: How did the growth in blood sports during the 19th century affect the landscape and economy of Perth and Kinross?

PKARF Qu 8.28: To what extent is there evidence of hunting with hounds in lowland areas of Perth and Kinross? Did this affect how the land was managed?

### 8.3.3 Health and Mortality

There is a need for far more research into patterns of health and mortality in Perth and Kinross during the 17th and 18th centuries. Several periods of famine affected 17th-century Scotland, with the last major famine in Perth and Kinross taking place in the 1690s. There has been some desk-based study of how the ‘ill years’ of the 1690s affected the region (Cullen et al [2006](#)). However, it would be interesting to see the extent to which this period of hardship can be discerned in the archaeological record, both through the analysis of human remains and the study of the landscape. The impact of the agricultural and tenurial changes of the 18th century on health and mortality also deserves more attention. It is likely that for some sections of society, this period saw an improvement in living standards, partly as a result of growing agricultural productivity and access to consumer goods. Yet for tenants who were displaced from the land, this may well have been a time when obtaining basic necessities became more difficult.

Written records provide invaluable insights into general demographic trends in 18th and 19th-century Perth and Kinross. In particular, the burgh of Perth is fortunate in having local censuses for 1766 and 1773 (Whatley [2011](#), 42–4). The [Statistical Accounts](#) also provide information regarding population and common diseases in specific parishes during the late 18th and early 19th centuries, and more systematic analysis of this data could be helpful. Comparison of the relative health and life expectancy of different communities in the region, including upland and lowland populations, and rural and urban settlements would be of particular interest.

Although written sources are likely to play a major role in our understanding of post-medieval health and mortality, archaeological techniques can still provide valuable insights. Recent scientific study of human remains from London has shown how stable isotope and microdebris analysis can enhance understanding of post-medieval diets and nutrition. In particular the greater range of surviving human tissues, such as hair, which are sometimes present in post-medieval burials make possible types of analysis that would be less viable with most older remains. These enable ‘the investigation of diet over both short and long timescales’ (Brown and Alexander [2016](#); Bleasdale et al [2019](#)).

While there are significant ethical considerations surrounding the excavation of any human remains, there are perhaps particular sensitivities concerning post-medieval burials, given the greater likelihood that modern communities will have familial connections to the graves disturbed. Purely research-driven interventions in post-medieval graveyards may

not be appropriate. However, when development necessitates the disruption of post-medieval burial grounds, it would be desirable for there to be detailed scientific study of surviving human remains, enabling researchers to build up an overview of the health, nutrition and (often) geographic origins of the post-medieval residents of Perth and Kinross. Further discussion of how such research may best be accomplished given the constraints of time, funding and ethics should be a priority.

Of course, buildings, both standing and demolished, also play a role in our understanding of changing experiences of health and mortality. During the post-medieval period, healthcare was increasingly provided by institutions. The 19th and early 20th centuries in particular saw an expansion in hospitals, nursing homes and asylums. Many of these buildings have since been demolished or converted to other purposes, with major changes to several sites taking place during the 21st century. A recent national [gazetteer of hospital sites](#) provides an introduction to a number of these locations. However, further interdisciplinary research into the evolution of hospitals in the region would be desirable. Whilst written records are likely to play a major role in any such study, physical evidence, particularly standing buildings, may reveal overlooked aspects of the story of healthcare in Perth and Kinross. Healthcare sites can also intersect with archaeology in other ways. The Murray Royal Asylum, Perth was quite advanced in some of its treatment for mental health, and encouraged patients to engage with archaeology and collections. Indeed, for a while, it had its own museum including archaeological materials.

Study of smaller sites associated with healthcare, such as pharmacies and doctors’ surgeries, would likewise be of interest. There are extensive written records concerning 18th- and 19th-century apothecaries in the burgh of Perth. These include documentation about the theft of the body of a woman named Anne Asplen by a group of surgeons and apothecaries in the 1720s (Perth and Kinross Archive B59/26/11/1/2/13). A project mapping the location of post-medieval apothecaries and pharmacies in Perth and Kinross might be of interest. Excavations in other parts of Britain have shown the possibilities of physical investigation of former apothecary sites, with even 17th-century apothecaries’ shops providing significant artefacts associated with healthcare (Watson [2015](#)).



HER/Canmore ID	Place/Site	NGR	State of Remains
MPK3464/ <a href="#">28369</a>	PERTH, HOSPITAL STREET; KING JAMES VI HOSPITAL	NO 1152 2343	A Listed. Extant, converted into flats.
MPK5835/ <a href="#">79587</a>	MURTHLY HOSPITAL / MURTHLY ASYLUM	NO 1022 3856	Demolished.
MPK8183/ <a href="#">113018</a>	BRIDGE OF EARN HOSPITAL	NO 1419 1809	Demolished.
MPK8668/ <a href="#">127579</a>	PERTH, BRIDGEND; MURRAY ROYAL HOSPITAL/ MURRAY ASYLUM	NO 1419 1809	Extant, derelict.
MPK10297/ <a href="#">158828</a>	PERTH; ROYAL INFIRMARY	NO 1026 2363	In use.
MPK10937/ <a href="#">162142</a>	BLAIRGOWRIE COTTAGE HOSPITAL	NO 1746 4461	In use.
MPK11435/ <a href="#">166591</a>	GLENLOMOND SANATORIUM / GLENLOMOND HOSPITAL	NO 1696 0494	Demolished.
MPK11785/ <a href="#">168274</a>	PITLOCHRY, IRVINE MEMORIAL HOSPITAL / PITLOCHRY DISTRICT NURSING HOME	NN 9438 5850	Demolished.
MPK12029/ <a href="#">178865</a>	DALPOWIE HOSPITAL; DALPOWIE HOUSE (SITE OF) / DALPOWIE MANSION HOUSE	NO 0514 3966	
MPK12140/ <a href="#">181201</a>	AUCHTERARDER, TOWNHEAD, ST MARGARET'S HOSPITAL	NN 9370 1258	B listed. In use.
MPK12582/ <a href="#">238894</a>	ABERFELDY, OLD CRIEFF ROAD, ABERFELDY COTTAGE HOSPITAL	NN 8609 4891	C Listed. In use.
MPK12625/ <a href="#">239089</a>	PERTH, PERTH PRISON, NORTH SQUARE, L BLOCK; PERTH PRISON HOSPITAL BLOCK	NO 1175 2247	Demolished.
MPK15154	OCHILL HILLS HOSPITAL	NO 0972 0748	Demolished.
MPK17937	STRATHMORE HOSPITAL, RATTRAY	NO 1928 4554	Demolished or converted?
MPK18857/ <a href="#">341062</a>	ABERFELDY, HOME STREET, THE HOME	NN 8577 4924	Demolished?
MPK18858/ <a href="#">341094</a>	PERTH, KINNOUL, ROSEBANK	NO 1252 2376	

Table 8.1 Post-Medieval Hospitals and Asylums in Perth and Kinross (data from Historic Environment Record).

### *Research Priorities*

PKARF Agenda 8.40: Research into the physical evidence for famine in Perth and Kinross during the 17th century.

PKARF Agenda 8.41: Further study of the impact of industrialisation and the agricultural changes of the 18th and 19th centuries on health and mortality.

PKARF Agenda 8.42: Interdisciplinary study of epidemic disease in the region.

### *Research Questions*

PKARF Qu 8.60: To what extent is there archaeological evidence for famine in Perth and Kinross during the 17th century?

PKARF Qu 8.61: How does industrialisation affect health and mortality in the region?

PKARF Qu 8.62: How do the agricultural changes of the 18th and 19th centuries affect health and mortality? Is it possible to see some rural groups benefiting while others experience worse health outcomes?

PKARF Qu 8.63: Did the spread of insurance from the mid-19th century onwards have an impact on health and mortality?

PKARF Qu 8.64: To what extent can we discern evidence for epidemic disease, (and perhaps disease control measures,) in the archaeological record?

### 8.3.4 Clothing and Dress

The range of sources for studying post-medieval clothing and dress are far more extensive than for earlier periods. A considerable body of texts and images providing evidence about dress in Perth and Kinross in the 17th, 18th and 19th centuries survive in local and national collections. Several complete items of clothing have also been preserved in the region – including a remarkable cream silk doublet, probably dating from the 1620s, which is now in the collections of Perth Museum (Payne et al [2011](#)). The museum also holds the Glover’s Dance Dress, an important example of local ceremonial costume. A unique survival, it brings together elements spanning the 17th to the 19th centuries, because of its oning place in town ceremonies. Notably, it was worn when the Glover Incorporation performed a sword dance on a floating platform in the River Tay in front of Charles I to celebrate his recent coronation in Edinburgh (Payne [1984](#); Bennett [1985](#)).

“Ancient Morrice Dancers Dress in Possession of the Incorporation of Glovers of Perth” Howie, J.C. Attrib (act, 1840 circa) © Perth Museum and Art Gallery

Nevertheless, archaeological techniques do still have a significant contribution to make regarding our understanding of what the post-medieval residents of Perth and Kinross used to wear. The role of archaeology is especially significant regarding the costume of less privileged sections of society. Whilst written and visual sources provide valuable insights into the clothing of Scottish elites, how poorer people and more remote communities dressed is much less documented. Further research into the dress of the non-elite residents of Perth and Kinross, particularly during the 17th and 18th centuries should be a priority. Although most clothes are likely to be poorly preserved in the archaeological record, even small items such as pins, buttons and brooches can provide invaluable clues as to prevailing styles of dress. In particular, comparative study of the attire prevalent in lowland and upland communities in Perth and Kinross would be desirable. Efforts to trace the impact of globalisation and mass-production on clothing in the region might also prove illuminating.

### *Research Priorities*

PKARF Agenda 8.43: Greater research into the clothing worn by non-elite residents of Perth and Kinross, (especially during the 17th and 18th centuries).

PKARF Agenda 8.44: Comparative study of clothing in upland and lowland communities.

PKARF Agenda 8.45: Research into the impact of globalisation and mass-production on clothing in Perth and Kinross.

### *Research Questions*

PKARF Qu 8.65: How did the less privileged residents of Perth and Kinross dress in the 17th and 18th centuries?

PKARF Qu 8.66: To what extent does the physical evidence indicate a notable difference in dress between upland and lowland areas of Perth and Kinross.

PKARF Qu 8.67: How did globalisation and industrialisation affect dress in Perth and Kinross?

### 8.3.5 Education and Childhood

The 17th, 18th and 19th centuries saw a growth in literacy and increasing efforts to provide the Scottish public with access to books. Perth and Kinross was at the forefront of this movement. Scotland’s first free public lending library was founded at [Innerpeffray](#) (MPK14007) in 1680 and was used by the local community until 1968. A school was also founded at [Innerpeffray](#) at the

same time as the library and remained operational until 1947 (MPK1363). In 1752 a circulating library, where borrowers paid for books, opened in Perth – this was the second library of this type to be established in Scotland, and the first outside of Edinburgh (Whatley 2011). One of the key interests of the Perth Literary and Antiquarian Society was the establishment of a library, admittedly just for the use of its all male membership. The 19th century saw further expansion in the provision of public libraries, partly as a result of the Public Libraries Consolidation (Scotland) Act of 1887. Greater research into the architecture and contents of the region’s historic libraries could be of value.



Innerpeffray Library © Perth and Kinross Heritage Trust

There was a major growth in formal education in Scotland during the post-medieval period. Interestingly, the expansion of educational opportunities was a trend which predates the 1872 legislation establishing compulsory elementary education. More than 100 schools, almost all of them post-medieval in date, are listed in the Historic Environment Record for Perth and Kinross. Nonetheless, this is almost certainly an under-representation of the number of educational establishments which once existed in the region. In particular, many smaller and older schools are at present poorly recorded. For instance, we know that in the early 19th-century Perth had ‘several boarding schools, for young ladies, of the most respectable description’ (Wood 1828, 300). However, these girls’ schools are not currently included in the Historic Environment Record. Interdisciplinary research into the location of pre-1870 schools in Perth and Kinross should be a priority. Many small schools, mostly long-abandoned, once existed in rural areas, those that survive should be recorded. More generally we need a greater understanding of who and what these small rural schools taught and if this differed, both in terms of intake and curricula, from urban

schools. Greater understanding of the shifting role of the church in providing education would likewise be desirable.

The 18th and 19th centuries were arguably characterised by new attitudes to childhood. The extent to which this transition can be discerned in the material culture of Perth and Kinross is a topic which deserves further research. The experience of childhood almost certainly varied considerably between different locations and ranks in society. The range and type of objects associated with childhood which can be identified, and how these vary across time and place, are questions of considerable significance. As material evidence about childhood is often quite small-scale and fragmentary, careful recording and analysis is essential. An interdisciplinary project, involving collaboration with museums, to study artefacts possibly connected with the region’s post-medieval children might be helpful.

#### *Research Priorities*

PKARF Agenda 8.46: Greater research into schools in Perth and Kinross before 1870.

PKARF Agenda 8.47: Interdisciplinary study, (including collaboration with museums,) of extant artefacts possibly associated with children from the region.

#### *Research Questions*

PKARF Qu 8.68: What can we discover about formal education in Perth and Kinross prior to the introduction of compulsory elementary education in the late 19th century?

PKARF Qu 8.69: How can we better understand the surviving artefacts associated with children?

PKARF Qu 8.70: To what extent are shifting attitudes to childhood in the 18th and 19th centuries discernible in the archaeological evidence from Perth and Kinross?

#### 8.3.6 Leisure and Sport

The post-medieval period saw the increasing development of specific places and buildings for recreation and exercise. This trend was particularly apparent from the late 18th century onwards, and may reflect changing attitudes to leisure. Theatres were one expression of the new purpose-built spaces for entertainment; in the early 19th century a theatre opened on [Atholl Street](#) in Perth (MPK13516). It was regarded by contemporaries as ‘an elegant little theatre’ which was ‘fitted up with great taste’ (Wood 1828, 301). This theatre closed in the 1850s, although the building still survives and has served a number of functions including



manufacturing clothing and operating as a restaurant (Smith [2017](#)). Greater study of this standing building would be of interest. In 1900 the current [Perth Theatre](#) (MPK10453), located between Mill Street and the High Street, opened. This was recently restored and a degree of recording of the building has been undertaken. However, further monitoring of the theatre and its furnishings would be advisable.



Original auditorium of Perth Theatre © HES

The early and mid-20th century saw the construction of cinemas in many of the larger settlements in Perth and Kinross. Early cinemas are known to have existed in [Aberfeldy](#) (MPK17603), [Auchterarder](#) (MPK16895), [Blairgowrie](#) (MPK16960), [Coupar Angus](#) (MPK11164), [Perth](#) (MPK11998) and Pitlochry (MPK20330). There was also a short-lived cinema in [Comrie](#) (MPK12701) for the labourers helping build local hydroelectric works, and the foundations of this structure are still visible (Hall and Lowe [2002](#)). The Playhouse Cinema in Perth remains operational as a movie theatre. However, most of the early cinemas in the region now serve other purposes or have been demolished, as the Blairgowrie Picture House was in the 2010s.

A degree of study of the region’s cinemas has been undertaken (Peter [2011](#)). Yet the unique architecture of these structures, often influenced by the art deco movement and other modernist styles, their significance for the history of popular entertainment in the region and their current vulnerability mean that further recording and investigation of the cinema buildings that remain should be a priority.

HER ID	Place/Site	NGR	State of Remains
MPK10453	<a href="#">Perth, 185 High Street, Perth Theatre</a>	NO 1171 2369	B Listed. Extant, in use and has undergone some redevelopment.
MPK11566	<a href="#">Pitlochry, Festival Theatre</a>	NN 9383 5761	Extant, in use.
MPK13516	<a href="#">Perth, 7 Atholl Street 77, 79 Kinnoull Street</a>	NO 1168 2392	B Listed. Extant, no longer in use.

Table 8.2 Theatres in Perth and Kinross (data from Historic Environment Record)



Perth Playhouse Cinema © HES

Various forms of physical exercise have long provided entertainment for spectators and participants. However, the post-medieval period saw an increasing formalisation of sporting activity. Perth and Kinross provides particularly rich evidence for the development of sport in post-medieval Scotland. There are numerous written references to sport in the 17th and 18th centuries in the region, and some notable associated artefacts, such as the silver ball of Rattray, which formed the trophy for a 17th-century handball competition (Rodger 1992). A number of places had their own forms of ball games, like the team game at Scone every Shrove Tuesday where participants ran with the ball until it was taken by the other side ‘but no person was allowed to kick it’ (Thomas 1796, 88). Both these sports, and these specific examples, had medieval roots and the evolving nature of such games is worth exploring further.

HER ID	Place/Site	NGR	State of Remains
MPK11164	<a href="#">Coupar Angus, Queen Street, Cinema / St Mary’s Roman Catholic Church; Playhouse Cinema</a>	NO 2224 3983	Extant, now returned to use as a church.
MPK11998	<a href="#">Perth, Murray Street, Playhouse Cinema</a>	NO 1160 2379	Extant, still in use.
MPK12701	<a href="#">Comrie, Twenty Shilling Wood</a>	NN 7626 2203	Ruinous? Site formerly a construction workers camp for Glen Lednock reservoir in 1950s. Now a caravan park.
MPK16895	<a href="#">Auchterarder, Townhead, Regal Cinema</a>	NN 9409 1261	Extant but derelict?
MPK16960	<a href="#">Blairgowrie, 22-26 Reform Street, Picture House</a>	NO 1783 4515	Demolished and redeveloped with flats.
MPK17603	<a href="#">Aberfeldy, Dunkeld Street, Birks Cinema</a>	NN 8567 4911	Extant, still in use.
MPK20330	REGAL CINEMA; LEISURE CENTRE, PITLOCHRY	NN 9384 5826	Extant, now a leisure centre.

Table 8.3 Early Cinemas in Perth and Kinross (data from Historic Environment Record)



Silver ball of Rattray © Perth Museum and Art Gallery

Archery, golf and football regularly appear in early records from the region (Thomson [1845](#)). During the 17th and 18th centuries, most of these activities took place in spaces that also served other purposes. For instance, in the 1770s it was noted that during ‘the spring and autumnal seasons’ the residents of Perth exercised with ‘golf-clubs and balls’ on the North and South Inches. However, their sport was ‘interrupted during the summer-season by the luxuriantcy of the grass’ which provided pasture for herds of cows (Adamson and Cant [1774](#), 18). Partly because of this mixed use, the physical evidence for many early sporting locations may be quite sparse. However, interdisciplinary study of sites associated with sport during the 17th and 18th centuries could be beneficial.

Animals were sometimes a part of sporting activity. The burgh of Perth has a long tradition of horse racing, with written evidence for racing on the South Inch as early as 1613 (Thomson [1845](#), 88). By the late 18th century, racing at Perth had moved to the North Inch, where a course of 2220 yards was constructed (Thomson [1845](#), 88). The racecourse on the North Inch is clearly marked on early 19th-century maps by [Robert Reid](#) and [John Wood](#). At the start of the 20th century, the racecourse moved to its present site in the park of Scone Palace. The main stand at the current racecourse is particularly noteworthy, as it dates from around 1908 and ‘is a rare example of a little altered early 20th century timber racecourse stand’ (Historic Environment Scotland [2013](#)). Further interdisciplinary study of the history of racing in Perth, and in particular the early years on the North and South Inches, might be of interest. Some racecourses

were more short-lived, but can leave traces in the way of derelict stands, as is shown by the stand at Uthrogle, Fife (Martin [1999](#)). The landscape impact and contribution of cross-country horse races also deserves more research. By the early 17th century, a cross-country horse race was run annually between Perth and Methven. The start and finish post was the 11th-century Goodlyburn Cross, which then stood in Letham (Hall et al [2011](#)).

More brutal entertainments involving animals also took place in post-medieval Perth and Kinross. In the 1790s it was noted that the schoolboys at Kirkmichael preserved ‘the custom of cock-fighting on Shrove Tuesday’ (Stewart [1795](#), 521). Meanwhile, the skeleton of a badly mistreated dog excavated in a post-medieval cess-pit on Mill Street in Perth perhaps provides evidence for dog-fighting (Bowler et al [1995](#); Hall [2002](#), 300–1; for the medieval background to dog breeds and uses see Smith [1998](#)). Further study of animal bones from the region may reveal more clues about blood sports.

The late 18th and early 19th centuries saw major changes to sport in Perth and Kinross, and across Britain more generally. Some traditional activities died out, while others became more regulated and standardised. In the 1790s it was remarked in Moulin that the ‘gymnastic exercises’ formerly popular in the Highlands had ‘almost totally disappeared’, and that activities such as shinty, wrestling, and ‘putting the stone’, were ‘now practised only by school-boys’ (Stewart [1793](#), 72). The heritage of the original highland games, and their 19th-century revival, deserves much more research.

One traditional activity which did survive was curling, and Perth and Kinross played an integral role in the development of this sport. Some of the first written references to curling occur in an early 17th-century collection of poetry by the Perth writer Henry Adamson (Adamson [1638](#)). There is also evidence for curling on Lochleven as far back as the 1660s, and the associated Kinross Curling Club may be the oldest in the world (Kerr [1890](#)). Curling ponds, often with associated structures, are common in the area, with 59 listed in the region’s Historic Environment Record, although more have been identified by the ongoing [Historical Curling Places](#) project. More research regarding the development of curling in the region, involving the study of written records, survey of curling sites – both formal constructed ponds and the informal use of frozen rivers and lochs, and study of curling stones, both in public collections and in private hands, would be desirable.

In the 1840s it was noted that the most popular games among the residents of Perth were ‘foot-ball, casting quoits, cricket, and golf’ (Thomson [1845](#), 87).



By this date activities such as golf and cricket were increasingly being organised by formally constituted clubs such as the Royal Perth Golf Society (founded in 1824) and Perth County Cricket Club (founded in 1826), whilst association football clubs were founded a little later. The 19th and early 20th centuries saw the establishment of numerous sports clubs and the construction of associated pavilions and facilities across the region. These related to a range of activities including football, cricket, tennis and bowls. Sporting sites are typically poorly recorded, and often experience pressure for development. The less durable construction techniques used for many early sports pavilions can also make these structures vulnerable. An interdisciplinary project to identify older sporting sites in the region and assess their state of preservation would be desirable, as would more contact with sports clubs about historic artefacts in their care.

### *Research Priorities*

PKARF Agenda 8.49: Further study of early cinemas, in particular greater further recording of sites where the future of the building is uncertain.

PKARF Agenda 8.50: Study of the former theatre on Atholl Street in Perth.

PKARF Agenda 8.56: Further research into the storage and transport of grain in the region.

### *Research Questions*

PKARF Qu 8.71: To what extent can we identify locations used for sport before the 19th and 20th centuries? Did these sporting activities leave any trace in the archaeological record?

PKARF Qu 8.72: What 19th and early 20th century sporting facilities survive? Are they at risk?

PKARF Qu 8.73: How can we best research and preserve early cinemas in Perth and Kinross, (including their interiors)?

PKARF Qu 8.74: What can the physical evidence reveal about the development of drama in Perth and Kinross?

## **8.4 Economy and Industry**

### **8.4.1 Economic Networks**

The large number of written documents for the post-medieval period means that we are less dependent on archaeology to understand international trade than is the case in many earlier periods. Any study of goods imported to or exported from post-medieval Perth and Kinross is likely to draw considerably on documentary sources. However, physical evidence

does still have a role to play in reconstructing economic networks in this period.

In regard to international trade, while written records do give us a remarkable insight into the goods that came from overseas, they provide much less detail on the eventual fate of these imports. What sort of people and places ended up using imported goods? How did their patterns of consumption change over time? Archaeological evidence is central to addressing such questions. Some important considerations regarding imported goods in post-medieval Perth and Kinross include improving our understanding of how far outside the burgh of Perth imported items tended to end up, and what levels of society and types of community used different sorts of imports. A question of particular interest regarding this period is of course the legacy of British imperialism, and the degree to which colonial goods and connections shaped this region of Scotland.

Archaeology is also key to understanding the economic networks that existed within a region, which official bodies were often much less concerned with documenting than international trade. Many of the economic connections which existed within Perth and Kinross prior to the period of improvement in the 18th century are poorly understood. It is likely that archaeological evidence will be central to understanding these regional connections, particularly in relation to small-scale producers and consumers.

### *Research Priorities*

PKARF Agenda 8.51: Interdisciplinary research into economic networks within Perth and Kinross, (including interaction across Highland / Lowland areas and rural / urban communities).

PKARF Agenda 8.52: Greater understanding of how connected Perth and Kinross was to the wider world early on in the post-medieval period.

PKARF Agenda 8.53: Study of the impact of globalisation and industrialisation on communities in Perth and Kinross.

PKARF Agenda 8.54: Study of the impact and legacy of imperialism and colonial connections on Perth and Kinross.

### *Research Questions*

PKARF Qu 8.75: What were the economic relationships between different communities in Perth and Kinross?

PKARF Qu 8.76: How great a role did imported goods play in Perth and Kinross before the late 18th century? Can we map the distribution and use of

imported items beyond the burgh of Perth?

PKARF Qu 8.77: What impact did the increasing globalisation and industrialisation of the 18th and 19th centuries have on the communities of Perth and Kinross?

PKARF Qu 8.78: To what extent can we trace the legacy of British imperialism in the material culture and landscapes of Perth and Kinross?

## 8.4.2 Food Processing and Distribution

A large number of post-medieval sites in Perth and Kinross were in some way connected with the processing, storage or sale of food. Traditionally, most of the food and drink consumed in Perth and Kinross was produced and processed relatively locally. The post-medieval period saw more imported ingredients in people's diets and a shift to larger-scale food processing. However, even in the early 20th century a significant proportion of local residents' food originated in the region.

During the post-medieval period, large amounts of grain were processed in Perth and Kinross. Grain was usually ground in local watermills, with 54 watermills listed in the Historic Environment Record, although few of these sites have been studied. The watermills recorded in Canmore and on early Ordnance Survey maps have been mapped in a [digital project](#) by Lara Calton and the National Library of Scotland. However, it is likely that many more medieval and early modern watermills in fact existed, and interdisciplinary research to identify their locations should be a priority to create a more accurate and reliable picture. At least two 17th-century windmills are also recorded in the region, at [Dunkeld](#) (MPK5446) and in the grounds of [Dunbarney House](#) (MPK3164). Again, there may well have been more of these structures than are at present recognised. Further work, including the analysis of written records and visual sources, to clarify the history of windmills in the region would be helpful. Although the topography and plentiful water of Perth and Kinross might suggest that watermills predominated over windmills in this region.

For much of the 17th and 18th centuries, most grain mills appear to have been relatively small. However, the 19th century saw the development of larger mill complexes. These were probably often on the site of earlier, smaller mills, as is the case with [City Mills](#) in Perth (MPK3452 and MPK12707). The 19th century also seems to have seen the transport of grain over longer distances and the storage of larger quantities. Several sizeable granaries were constructed in the region at this time, sometimes sited near to railways, as at [Blairgowrie](#) (MPK8159) and [Methven Station](#) (MPK10503). More research into the storage and transport of grain in the region, both in the 19th

century and earlier could prove illuminating.



Dunbarney windmill © Perth and Kinross Heritage Trust

Bread was almost certainly a staple food for many post-medieval communities in Perth and Kinross, although we should also note the likely popularity of bannocks, which were often cooked on griddles over open fires in the home. Few private or commercial bakeries and bakehouses have been identified or archaeologically investigated, with only three probable post-medieval bakeries listed in the Historic Environment Record for the region. This is despite the fact that there is extensive written evidence for their existence. Research into the probable locations of bakeries and the possible physical evidence they might leave behind should be a priority.

Grain, and in particular barley, was of course also utilised in the production of beer and whisky. The early modern period saw brewing shift from being a relatively domestic activity often undertaken by women, to being a largely (but not exclusively) male-dominated industrial process (Ewan [1999](#)). However, the associated activity of malting was usually a masculine occupation throughout the medieval to modern periods. Further study of brewing and malting in Perth and Kinross during the 17th century would be desirable.

During the 18th and 19th centuries, brewing became an increasingly large-scale commercial activity. By the 19th century, significant commercial breweries existed in a number of places in Perth and Kinross, including [Blairgowrie](#) (MPK9841), [Gleneagles](#) (MPK7006) and [Perth](#) (MPK8653). Some recording of the premises of these slightly larger breweries has been undertaken. The significance of Blackford as a centre for brewing should also be noted. There is evidence for commercial brewing in Blackford as early as 1610, and in the 19th century the village had no fewer than three major breweries (Gibb and Sangster [2015](#)).



Blairgowrie brewery © HES

Perth and Kinross has an extensive history of whisky distilling. Some research into the history of some notable distilleries such as [Dewar's](#) (MPK6011) has been undertaken. However, study of the development of distilling in Perth and Kinross has been relatively restricted in comparison to the attention paid to this industry in some parts of the Highlands and Western Isles (Seargeant [2011](#)). Yet Perth and Kinross has the potential to play a significant role in our understanding of the transition of whisky production from a small-scale mainly farm-based, and sometimes illicit, operation into an international industry. Among other sites, the region is home to [Edradour Distillery](#) (MPK1602), perhaps 'the last of the small farm distilleries' (Hay and Stell [1986](#)). Research into smaller distillery sites in the region could be of considerable interest.



Edradour Distillery © HES

Animal products formed an important part of the diet of post-medieval residents of Perth and Kinross. Yet only one abattoir, namely [Perth](#)

[Slaughterhouse](#) (MPK13399), is currently noted in the Historic Environment Record for the region. Three post-medieval butcher's shops are also listed in the HER. This is clearly a major under-representation of the sites associated with the slaughtering of animals and the sale of meat. Written evidence shows that the fleshers, or butchers, were one of the historic trades in the burgh of Perth, whilst 19th-century directories record numerous butchers in Perthshire. Recent decades have seen the closure of several smaller slaughterhouses and it is likely that many of these sites will see significant alterations and development – perhaps providing opportunities for archaeological intervention.

The contribution cheese-making and other dairy products made to the diet and economy of Perth and Kinross should also be noted. Butter and cheese are frequently mentioned in written records for upland and lowland areas, and during the 17th and 18th centuries rents and fines were sometimes paid in cheese (Mills et al [2013](#); Atkinson [2016](#), 104). There is evidence for dairying taking place at shielings and some flat stones excavated during the Ben Lawers Historic Landscape Project were tentatively interpreted as cheese-weights (Atkinson [2016](#), 238–9). More study of the sites and artefacts associated with the processing of dairy products throughout the post-medieval period would be beneficial.

Finally, much more research into the shops which sold food would be desirable. By the late 19th century, shops were where most residents of Perth and Kinross obtained the bulk of their foodstuffs. In recent decades, the archaeology of shopping has attracted increasing scholarly attention (Cook et al [1996](#)). However, little detailed archaeological research has been undertaken regarding food shops in post-medieval Perth and Kinross, although an interdisciplinary project exploring written records and standing building has been carried out (Lennie [2008](#)). Evidence from excavation could bring greater understanding of the new approaches to trade and consumption which emerged during the post-medieval period.

### *Research Priorities*

PKARF Agenda 8.55: Interdisciplinary study of mills, (both watermills and windmills,) in Perth and Kinross. Many of these will at times have been used for other purposes than food.

PKARF Agenda 8.56: Further research into the storage and transport of grain in the region.

PKARF Agenda 8.57: Research into malting and brewing in the region and its evolution over the course of the post-medieval period.



PKARF Agenda 8.58: Study of early distilleries, (both official and illicit).

PKARF Agenda 8.59: Identification of the locations of post-medieval bakeries.

PKARF Agenda 8.60: Identification of the sites of post-medieval slaughterhouses-houses and butcher's shops.

PKARF Agenda 8.61: Study of how food shops evolve over the course of the post-medieval period.

### *Research Questions*

PKARF Qu 8.79: What can we learn about post-medieval watermills in Perth and Kinross?

PKARF Qu 8.80: What evidence is there for windmills in the region?

PKARF Qu 8.81: How can the physical evidence enhance our understanding of the development of brewing in post-medieval Perth and Kinross?

PKARF Qu 8.82: What can we discover about early distilling in Perth and Kinross? What physical evidence is there from distilleries?

PKARF Qu 8.83: Where were the post-medieval bakeries? What archaeological evidence have they left?

PKARF Qu 8.84: Where were animals slaughtered in Perth and Kinross?

PKARF Qu 8.85: How did the function and design of shops evolve in Perth and Kinross during the post-medieval period?

### 8.4.3 Textile Production

There was significant textile production in Perth and Kinross long before the post-medieval period. As well as making items for local use, the region also exported cloth during the later Middle Ages. The cloth trade in the region was initially focused on woollen fabrics. However, the late 17th century saw a growth in the production of linen, and by the 1720s it was noted that Perth had 'a vast trade for linen' (Macky 1723, 146). Over the following decades, the linen industry continued to expand, although by the 1790s an increasing quantity of cotton fabrics were also being made in the region (Scott 1796, 513).

Perth played a major role in the local cloth trade, with a significant proportion of the region's textiles being woven in the burgh and its immediate environs. At the end of the 18th century, Perth supposedly had 'above 1,500 looms employed in the town and suburbs' (Scott 1796, 513). These produced textiles worth about £100,000 a year. However, much of the

textiles from the wider region also passed through the hands of merchants in Perth; this amounted to a trade worth a further £120,000 a year (Scott 1796, 513). By the 1820s, textile manufacturing in Perth had grown further and had largely shifted from linen to cotton, with 'nearly 3,000 looms' in the burgh 'employed on gingham, shawls, muslins, and other cotton fabrics' (Wood 1828, 307). Yarn for the weavers in Perth was often produced in outlying communities. For example, in the 1790s 'not less than 200,000 spindles' of yarn were purchased each year from 'the country above Dunkeld' (Anonymous 1798, 430).

Archaeological investigation of cloth production in Perth and Kinross has been limited. There has been some recording of retting ponds – pools of water in which flax was soaked prior to the fibres being separated for making into linen. There are at least 19 locations in Perth and Kinross where possible post-medieval flax retting ponds have been identified. Further study of these features would be of interest. The 18th century also saw the development of small scutch or lint mills for preparing the flax fibres for linen making. The former lint mill at [Invervar](#) (MPK13388) has received a degree of study during a wider survey of the shrunken village in which it is located (Dalland 2000, 72).

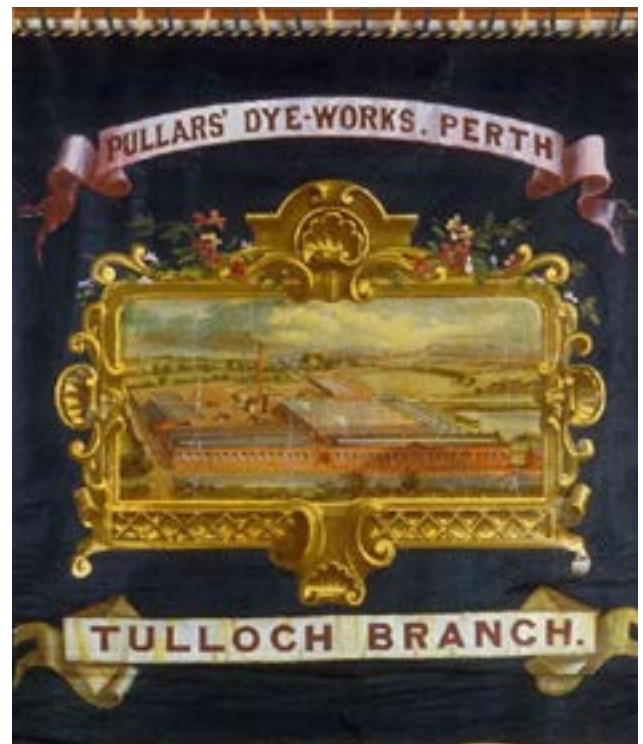
It is likely that during the 17th and 18th centuries the bulk of textile production took place in and around workers' homes. Further research into rural textile producing communities should be a priority in both upland and lowland areas of Perth and Kinross. There is also considerable potential for interdisciplinary investigation of weavers' premises and other sites associated with the textile industry in the burgh of Perth, and further afield, during the 17th, 18th and first part of the 19th centuries. There is evidence that in Milnathort cellar loomshops gave way to a handloom factory for weaving woollens (Watson 2021). Evidence for equivalent cellar loomshops in Perth and other weaving centres would be of considerable interest, as would evidence for loomshops on ground floors and upper storeys.

The archaeology of bleachfields is a topic of particular interest; several of these sites were documented in the vicinity of Perth during the 18th century. Written sources indicate that by the 1790s the bleachfields in Perth and Kinross were not simply processing textiles made in the local area but were also bleaching cloth from Dundee, Edinburgh, Glasgow, and even England (Inglis 1796, 638). There was a concentration of bleachfields along the River Almond, an area which is currently seeing significant development. Interdisciplinary study of this industry, drawing on textual sources and, where possible, physical investigation, should therefore be a priority.

HER ID	Place/Site	NGR	State of Remains
MPK2108	<a href="#">Luncarty Bleachworks</a>	NO 0990 2990	Demolished, except the water systems, housing and community buildings.
MPK3290	<a href="#">Stormontfield Bleachworks</a>	NO 1056 2976	One building survives that has been converted into a house.
MPK5326	<a href="#">Huntingtowerfield, Bleach and Dye Works / Huntingtower Bleachworks; Huntingtowerfield, Bleachwork</a>	NO 0721 2577	Redeveloped into housing with most of the complex removed. Listed clock tower is all that remains.
MPK7919	<a href="#">Ruthvenfield Bleachworks</a>	NO 0814 2537	Demolished?
MPK7922	<a href="#">Tulloch Bleachworks</a>	NO 1017 2500	Demolished?
MPK8022	<a href="#">Cromwellpark Bleachworks</a>	NO 0544 2700	Demolished. One derelict building present in 1977.
MPK8023	<a href="#">Pitcairnfield Bleachworks</a>	NO 0683 2581	Some surviving structures, notably the supposed chapel for the workers still stands.
MPK10976	<a href="#">Ingleside House</a>	NO 2239 0131	Ruinous/demolished?
MPK14206	<a href="#">Stanley Mills East Range</a>	NO 1145 3282	Extant, listed. Works underway 2022.

Table 8.4 Bleachworks in Perth and Kinross (data from Historic Environment Record)

By the early 19th century, cloth production was increasingly shifting to purpose-built factories, and several larger textile mills and dye works, such as Pullars on Mill Street, Perth and Campbells at Tulloch, were constructed. Many of these factories remained operational into the 20th century, and substantial buildings still survive. The larger industrial sites have received more recording and study than the remains from earlier phases of the textile industry. In particular, there was extensive research into the complex of late 18th and 19th-century cotton manufacturing buildings at [Stanley Mills](#) (MPK8541) shortly before some of them were converted into housing (Cressey and Fitzgerald 2011). However, further research into larger mills and dye works in the region could still be beneficial, with archaeological intervention being particularly desirable if buildings are undergoing significant alterations or conservation work.



Pullars of Perth Dye-Works shop banner © Perth Museum and Art Gallery

### Research Priorities

PKARF Agenda 8.62: Interdisciplinary study of hand loom weaving in the region.

PKARF Agenda 8.63: Research into the locations and processes by which flax was prepared.

PKARF Agenda 8.64: Greater study of printfields and bleachfields, use of water, and associated communities.

PKARF Agenda 8.65: Further recording of surviving industrial buildings associated with textile production.

### Research Questions

PKARF Qu 8.86: What can we learn about textile production in rural communities?

PKARF Qu 8.87: What physical evidence is there for hand loom weaving in Perth? Are there distinctive features by which surviving weavers' houses may be identified?

PKARF Qu 8.88: How do the cellar loom shops for weaving calicoes in Milnathort compare to other loom shops used by linen weavers in Perthshire towns?

PKARF Qu 8.89: What hand loom or power loom factories are identifiable for linen, cotton or wool textile production?

PKARF Qu 8.90: Where and how was flax prepared in the region?

PKARF Qu 8.91: Are there unidentified lades to irrigate fields for bleaching and printfields?

PKARF Qu 8.92: How does industrialisation alter the textile industry in the region?

### 8.4.4 Leather Working

The burgh of Perth was a major centre for manufacturing leather goods. In the 1820s it was noted that Perth had 'long been eminent' in the making of 'boots, shoes, and gloves' (Wood [1828](#), 307–8). Many of these accessories were for use in other parts of the British Isles, with a significant trade in leather goods between Perth and London. In the 1790s tanners in Perth were apparently processing about 4,000 to 5,000 hides and about 6,000 calf skins each year (Scott [1796](#), 517).

The production of leather goods was an important regional industry. However, there has been surprisingly little archaeological research into sites associated with post-medieval leatherworking. Excavations in the Curfew Row area of Perth in

the early 2000s revealed five tanning pits, lined with clay and wood, and probably used during the 17th or 18th centuries (Cox et al [2007](#), 137–8). Overall, though, relatively few sites associated with leatherworking are listed in the region's Historic Environment Record. It includes only six possibly post-medieval tanneries: two in Crieff on [Milnab Street](#) and [Leadenflower Road](#) (MPK6165 and MPK18846), two in Auchterarder (MPK15546 and MPK15547), one in [Coupar Angus](#) (MPK9999) and the Curfew Row site in Perth (MPK15255). Yet, there are references to tanning at additional sites in Perth and beyond in the *Statistical Accounts*, trade directories and other written sources. An interdisciplinary project, including field survey and desk-based study, of sites associated with the post-medieval leather industry should be a priority.

### Research Priorities

PKARF Agenda 8.66: An interdisciplinary project to identify sites associated with leatherworking in post-medieval Perth and Kinross.

### Research Questions

PKARF Qu 8.93: Where were the tanneries located?

PKARF Qu 8.94: How did the leather industry in Perth evolve over the course of the post-medieval period?

PKARF Qu 8.95: What evidence is there for leatherworking outside of the burgh of Perth?

### 8.4.5 Metalworking

At the start of the 17th century, Perth and Kinross already had an established tradition of metalworking. The hammermen, or metal workers, were one of the main guilds in the burgh of Perth. During the post-medieval period, the Perth hammermen's guild at various points included goldsmiths, silversmiths, blacksmiths, gunsmiths, cutlers, clock makers, white-iron smiths, bellhangers and makers of brass and pewter (Hunt [1889](#)). Debris from metalworking has been recovered from a number of post-medieval sites in Perth, including excavations on Methven Street and Mill Street (Photos-Jones and Atkinson [1999](#)). However, in comparison to the research into medieval metalworking in the burgh of Perth, post-medieval metalworking has received much less attention. Interdisciplinary study of this topic would be beneficial.

The raw materials for metalworking in the 17th and 18th centuries were often imported, and there is extensive written evidence for the trade in iron ore between Scandinavia and Scotland (Whyte [1995](#)). However, there was a certain amount of local iron smelting. Perth and Kinross has over 30 sites where



there is evidence of bloomeries – small furnaces for smelting iron. There has been study of some of the bloomeries in the Rannoch area (Aitken [1970](#); Atkinson [2003](#)). However, most of these sites have not been satisfactorily dated. Bloomeries are often assumed to be medieval but more detailed investigation can show much later use. Further study of bloomery sites in Perth and Kinross, including carbon dating, should be a priority.

Until the early 19th century, most metalworking in Perth and Kinross was relatively small-scale. Local small-scale metalworking continued in rural communities into the 20th century, and the sites of at least 69 blacksmiths' workshops are listed in the Historic Environment Record for Perth and Kinross. It is likely that in reality many more existed, and further interdisciplinary research into the location and date of smithies would be of interest. Many smithies have been converted to other uses, such as homes, and careful investigation of these sites should be considered when alterations and development take place.

By the 1800s, larger-scale casting of iron and brass was also being undertaken, although Perth and Kinross did not become a major centre for manufacturing metal goods. Following the Industrial Revolution, the bulk of Scottish metalworking was focused on the Central Belt. However, the burgh of Perth did have several foundries in the 19th century. One of the best known of these was [Perth Foundry](#) (MPK13486), which made mill machinery, and was formerly located on Paul Street. Another foundry (MPK8560) stood between Foundry Lane and Murray Street. A watching brief on [Murray Street](#) (MPK3391) in 1985 discovered slag, clinker and other metalworking debris. An ironworks also existed between Milnathort and Kinross, where substantial buildings and an engine house survive. Further research into foundry sites and their products in the region would be helpful.

### *Research Priorities*

PKARF Agenda 8.67: An interdisciplinary study of post-medieval metalworking in the burgh of Perth.

PKARF Agenda 8.68: Further research into bloomeries in Perth and Kinross, (including greater use of carbon dating).

PKARF Agenda 8.69: Interdisciplinary research into smithies in the region.

PKARF Agenda 8.70: Research into foundries in Perth and Kinross.

### *Research Questions*

PKARF Qu 8.96: What can we discover about post-

medieval metalworking in the burgh of Perth, (including from the records of the Hammermen Incorporation)?

PKARF Qu 8.97: How old are the bloomery sites in Perth and Kinross? How many of them show evidence of post-medieval use?

PKARF Qu 8.98: Can we identify more post-medieval smithies in Perth and Kinross?

PKARF Qu 8.99: How did industrialisation affect metalworking in Perth and Kinross?

### 8.4.6 Pottery

The use and manufacture of ceramics was well-established in lowland areas of Perth and Kinross long before the end of the medieval period (Hall [1996](#); [1998](#)). In contrast, there is reason to believe that some upland communities in the region may have been largely aceramic up until the late 18th century (Atkinson [2016](#), 262). Instead, utensils were largely of wood, metal or bone. Further research into the presence, or absence, of pottery items in upland areas during the 17th and 18th centuries should be a priority.

Both imported and locally produced wares were present in 17th- and 18th-century lowland communities in Perth and Kinross. Locally produced post-medieval ceramics have been discovered at a number of sites in the burgh of Perth, including 45 Canal Street and St John's Square (Blanchard [1983](#); Hall [2016](#)). However, no post-medieval pottery production sites have been firmly identified or excavated in the region, although scientific analysis of ceramic sherds suggests they did exist. This phenomenon is not unique to Perth and Kinross; the first post-medieval pottery production site to be excavated in the west of Scotland was only found in the 2010s (Paton [2015](#)).

In comparison to the extensive study of medieval ceramics from Perth and Kinross, post-medieval pottery has received less attention; this is a lacuna that is apparent in many parts of the British Isles (Cumberpatch [2003](#)). Ironically, the limited archaeological interest in post-medieval pottery may reflect the frequency with which such items are discovered, particularly in urban areas. They are regarded as common finds of no great significance other than as an indicator of chronology. However, post-medieval ceramics have the potential to provide clues about cultural contact, social and economic change and many details of daily life. More systematic study of 17th and 18th-century pottery from Perth and Kinross would be especially desirable, and might help elucidate early post-medieval patterns of consumption.

The late 18th and early 19th centuries saw a major expansion in access to ceramic items in Perth and Kinross. Indeed from the 1790s onwards, a wide range of pottery items are found even in relatively remote upland communities. For example, the Ben Lawers project excavated a considerable quantity of 19th-century bowls, plates, teapots and jars from communities which only a generation earlier showed limited evidence of using ceramics (Atkinson [2016](#), 142–3). These 19th-century ceramics were largely mass-produced items which had been imported to the region from the major pottery manufacturing areas of the British Isles. It seems likely that growing access to items from the big pottery centres, such as Staffordshire, severely undermined local ceramic production in Perth and Kinross.

However, some tile and brick production did continue in Perth and Kinross. Bricks for the Bell Mill (1786–7) at Stanley, and the houses in Store Street, are assumed to have been from local clays and clamp kilns. The region also had 19th- and 20th-century tile and brick production at locations such as the [Strathallan Brick, Tile and Pottery Works](#) at Wallfauld (MPK6181), the [Pitfour Brick and Tile Works](#) at St Madoes (MPK13384) and the [Errol Brick and Tile Works](#) at Inchcoonans (MPK10389). Further research into these sites might be of interest, both for what they can reveal about the 19th-century production of building materials and as locations which may have a longer history of making items from clay.

### Research Priorities

PKARF Agenda 8.71: Systematic study of 17th- and early 18th-century pottery found at upland and lowland sites in Perth and Kinross.

PKARF Agenda 8.72: Identification of likely 17th and early 18th-century ceramic production sites in Perth and Kinross.

PKARF Agenda 8.73: Improved understanding of the development of tileworks and brickworks in Perth and Kinross.

### Research Questions

PKARF Qu 8.100: To what extent were 17th- and early 18th-century upland settlements aceramic?

PKARF Qu 8.101: What types of ceramic items were used in Perth and Kinross during the 17th and early 18th centuries?

PKARF Qu 8.102: How does the mass-production of ceramic items in the late 18th and 19th century affect Perth and Kinross?

PKARF Qu 8.103: What can we discover about the

history of tile and brick making in Perth and Kinross?

### 8.4.7 Timber and Woodworking

Much of the research concerning the post-medieval timber industry in Perth and Kinross has focused on the Black Wood of Rannoch. In the early 1670s a sawmill was established at the mouth of Loch Rannoch (Lindsay [1974](#), 264; Mills [2010](#)). This was one of the earliest recorded sawmills in Scotland and appears to have produced pine deals, or boards, mainly for local use. A further sawmill existed at Carie by the 1680s (Lindsay [1974](#), 265). Extensive 18th-century records survive regarding the Black Wood, particularly following the area's forfeiture to the British government. Wood from Rannoch was sent to Perth and other locations in the region; it is likely that a significant amount of Rannoch pine survives in standing buildings in Perth and Kinross. Dendrochronological investigation, in particular of historic sarking boards, might help identify the products of early sawmills in the region.



Black Wood of Rannoch © Richard Webb (CC BY-SA)

Waterways appear to have been key to moving timber around the region during the post-medieval period, with considerable quantities of wood being transported along lochs and rivers (Lindsay [1974](#)). There is also evidence in the Black Wood of Rannoch of canal-like chutes being used to move felled timber, although the exact date of these structures is unclear. Far more archaeological research could be undertaken regarding post-medieval remains from the timber industry (Lindsay [1974](#); Mills [2010](#); Mills [2021](#)).

A great deal could be learned about built heritage, timber supply and landscape change through the dendrochronological analysis of 17th- and 18th-century buildings in Perth and Kinross. Surprisingly

little dendrochronological study has been undertaken on post-medieval buildings in the region, although there has been recent investigation at [Sunnybrae Cottage](#) (MPK13872) in Pitlochry (Mills [2021](#); Mills and Crone [forthcoming](#)). This ash cruck cottage is probably from the late 18th or early 19th century, but further extension of the native ash tree-ring records is required before it can be securely dated through dendrochronology.



Original woodworking in Sunnybrae House, Pitlochry © HES

While it is likely that some native timber was used for construction work in post-medieval Perth and Kinross, imported timber was also important. The 18th century is an especially interesting period regarding timber supply. In other parts of Scotland, we see a shift at this time from Scandinavian to Eastern Baltic structural timbers (Crone and Mills [2013](#)). Further research is needed to see whether a similar pattern applies to Perth and Kinross.

Bobbin and other turning mills can be found in forested areas. A survey drawing on map and documentary evidence found 23 turning mills in Perthshire during the 19th century (Gilliat [2018](#)). One of these mills, in Perth, was steam-driven. A similar study of Kinross-shire might be of interest. Many of the bobbin mills in Perthshire served other functions before they started producing bobbins and shuttles for the textile industry. Greater research into these sites would be desirable.

### Research Priorities

PKARF Agenda 8.74: Wider use of dendrochronology with the aim of creating a detailed tree-ring record for the region.

PKARF Agenda 8.75: Research into how the sources and use of imported timber changed in Perth and Kinross over the course of the post-medieval period.

PKARF Agenda 8.76: Research into how different technological developments affect woodworking in Perth and Kinross.

### Research Questions

PKARF Qu 8.104: What can we learn about timber supply from the application of dendrochronology to the region's standing buildings?

PKARF Qu 8.105: How does the introduction of new technologies impact woodworking in Perth and Kinross over the course of the post-medieval period?

### 8.4.8 Ship and Boat Building

During the late 18th and early 19th centuries, there were several shipyards on the River Tay near Perth. These primarily built wooden sailing vessels. However, steamers were also constructed at Perth; the shipyard owned by James Brown built the wooden paddle steamer the *Union* in 1821. Ship building continued at Perth until the 1890s, although it had begun to decline in the 1850s. There are extensive maritime records concerning many of the ships built at Perth, and property documents regarding some shipyards are preserved in Perth and Kinross Archives (for instance, PE/46/11/Bundle12). Interdisciplinary study of Perth's shipyards would be desirable.

There was also a lengthy tradition of building smaller, often rowing, vessels for use on the River Tay. For example, the salmon fishing industry encouraged the production of considerable numbers of traditional Tay cobbles (cobles) – small flat-bottomed boats typically used for fishing or as ferries. The small boat building tradition on the Tay has continued into recent times. However, our understanding of how this trade, and the design of the boats built, evolved over the post-medieval period is limited at present. As there have been extensive changes to the use of the River Tay, and to traditional boat building in the area, within living memory, it might be advisable for research into this aspect of the region's past to be undertaken in the near future. This would enable local community memories to be compared with the study of written records and whatever physical evidence can be uncovered.

### Research Priorities

PKARF Agenda 8.77: Interdisciplinary research, (including oral history,) regarding the tradition of building small boats in the region.

PKARF Agenda 8.78: Research into the former



shipyards by the River Tay.

### *Research Questions*

PKARF Qu 8.106: What can we discover about the design and construction techniques of small boats in the region?

PKARF Qu 8.107: What physical evidence is there for the main 18th- and 19th-century shipyards on the Tay?

PKARF Qu 8.108: Can we find archaeological evidence for ship building in the 17th and early 18th centuries?

### 8.4.9 Extractive Industrial Activity

Lime was increasingly used during the post-medieval period – both for buildings and in agriculture. During the period of agricultural improvement, considerable quantities of lime were employed to improve the quality of acid soil. By the end of the 18th century, lime kilns were a common feature in Perth and Kinross; at least 352 lime kilns are noted in the region’s Historic Environment Record. However, it is likely that the familiar stone-arched draw kilns have been noted to a greater extent than the, perhaps equally productive, temporary clamp kilns (Bishop et al [2017](#)). There is a particular concentration of lime kilns in the north of the region, especially around Kirkmichael, Pitlochry, Aberfeldy, and Bridge of Tilt (Mitchell [2020](#), 99–100). Several of these kilns supplied lime for communities some distance away, a process that was facilitated by improvements in transport during the late 18th century (Mitchell [2020](#), 141–2). Further study of the wider economic and transport networks associated with lime kilns might be of interest. There has been increasing recognition in recent years of the importance of lime kilns for 18th- and 19th-century agriculture, but much more work on their typology and dating in Perth and Kinross would be desirable.

No fewer than 339 stone quarries are recorded in the Historic Environment Record for Perth and Kinross. These provided a range of materials, including sandstone (at least 24 quarries), limestone (at least 16 quarries) and slate (at least four quarries). Most of these sites have received very little physical or desk-based investigation and have not been securely dated. Analysis of the materials used in standing buildings could perhaps provide some insights into the history of quarrying in the region (Gauldie [1981](#)). Yet stone from Perth and Kinross was not simply used for local construction work. In the 1790s it was remarked that the quarry at Kingoodie sent ‘considerable quantities’ of stone to England and had recently provided materials for the construction of canals near Ipswich and in Essex (Anonymous [1797](#), 464). Further interdisciplinary research into mining and quarrying in Perth and Kinross would be highly

desirable, and should draw on the Building Stone Database for Scotland, a joint project by Historic Environment Scotland and the British Geological Society.

### *Research Priorities*

PKARF Agenda 8.79: Further research into mining and extractive industries in Perth and Kinross, (including slate and stone quarries).

PKARF Agenda 8.80: Investigation of the role of water power, (ranging from 17th-century mills to 20th-century hydroelectric projects).

### *Research Questions*

PKARF Qu 8.109: How do industrial buildings evolve over the post-medieval period?

PKARF Qu 8.110: What industrial sites are currently at risk from dereliction or demolition?

PKARF Qu 8.111: What role has water power played in the region?

PKARF Qu 8.112: Where was limestone extracted in Perth and Kinross?

PKARF Qu 8.113: What was the nature of the relationship between rural and urban communities regarding the exploitation and transport of limestone, sandstone and slate?

PKARF Qu 8.114: How can detailed standing building recording help to trace the evolution of industrial buildings through time?

### 8.4.10 Public Utilities

During the 20th century, Perth and Kinross became significant for hydroelectric power (Historic Environment Scotland [2016](#)). The first hydroelectric project in the region was initiated by the Duke of Atholl before the First World War, when a turbine was placed across the Banvie Burn to provide electricity for Blair Atholl (Liddell [2008](#)). The 1930s and 1940s saw the development of commercial hydroelectric projects, leading to the creation of a new reservoir at [Dunalastair](#) (MPK11917), and the construction of dams and power stations in the vicinity of Lochs Erich, Rannoch and Tummel (Liddell [2008](#)). Following the Second World War, this scheme in the Tummel-Garry area was expanded, and the new Breadalbane hydroelectric scheme was begun. A wide range of structures, including dams, weirs, houses and fish ladders, were built in the mid-20th century for the hydroelectric industry. Many have received a degree of recording, but further study would be desirable.

HER ID	Place/Site	Site Type	NGR
MPK7938	<a href="#">Rannoch Hydroelectric Power Station / Loch Rannoch; Rannoch Hydroelectricity Scheme</a>	Hydroelectric Power Station	NN 5300 5828
MPK8661	<a href="#">Perth, Friarton; Electricity Generating Station</a>	Gas Power Station	NO 1200 2210
MPK8771	<a href="#">Pitlochry, Loch Faskally, Dam, Power Station and Fish Ladder / Pitlochry Salmon Ladder: Port-na-Craig Dam</a>	Hydroelectric Power Station	NN 9354 5778
MPK11362	<a href="#">Loch Breaclauch Hydroelectric Scheme, Glen Lednock Generating Station</a>	Hydroelectric Power Station	NN 6978 3037
MPK11383	<a href="#">Tummel Power Station / Tummel Hydroelectricity Scheme; Tummel Bridge; River Tummel</a>	Hydroelectric Power Station	NN 7635 5900
MPK11904	<a href="#">Gaur Power Station / Strath Tummel; Tummel Hydroelectricity Scheme; Easan Garbh Dhuin; Loch Eigheach</a>	Hydroelectric Power Station	NN 4641 5686
MPK11921	<a href="#">Errochty Power Station / Tummel Bridge; Tummel Hydroelectricity Scheme</a>	Hydroelectric Power Station	NN 7727 5929
MPK11944	<a href="#">Loch Faskally, Clunie Power Station / Tummel Hydroelectricity Scheme</a>	Hydroelectric Power Station	NN 9127 5977
MPK14257	<a href="#">Stanley Mills Hydroelectric Power Station</a>	Hydroelectric Power Station	NO 1153 3282
MPK17985	<a href="#">Cashlie Power Station</a>	Hydroelectric Power Station	NN 5069 4214
MPK17988	<a href="#">Lubreoch Power Station</a>	Hydroelectric Power Station	NN 4533 4174
MPK18293	<a href="#">Trinafour Power Station</a>	Hydroelectric Power Station	NN 7248 6476
MPK18301	<a href="#">Finlarig Power Station</a>	Hydroelectric Power Station	NN 5853 3453
MPK18304	<a href="#">St Fillans Power Station</a>	Hydroelectric Power Station	NN 6901 2460
MPK18305	<a href="#">Dalchonzie Power Station</a>	Hydroelectric Power Station	NN 7405 2197
MPK18628	Powerhouse, Strathay Hydro Scheme	Hydroelectric Power Station	NN 9116 5324

Table 8.5 Power Stations in Perth and Kinross (data from Historic Environment Record)



Stanley Mills hydroelectric power station © HES

## 8.5 Religion and Ritual

### 8.5.1 Churches, Chapels and other religious buildings

The post-medieval period saw many new churches being founded, and extensive redesigning of existing church buildings. This was partly a result of the growing range of religious denominations present in Perth and Kinross, which included Baptists, Catholics, Episcopalians and numerous groups that broke away from the Church of Scotland. However, the poor repair of many older churches, a wish to improve religious provision in inadequately served parishes and changing fashions in ecclesiastical architecture also led to the construction of many new buildings for Church of Scotland congregations.

During the 17th century, major construction work took place at a number of parish churches in the region, such as [Bendochy](#) (MPK5236), [Tibbermore](#) (MPK5543) and the [Old Kirk](#) at Weem (MPK1052). One of the most notable buildings from this period is St Mary's Church at [Grandtully](#) (MPK1105), which was extended in the 1630s and has an elaborately painted pine ceiling – one of only two ceilings of this type to survive in situ in a Scottish ecclesiastical building. Although some study of this ceiling and its iconography has been undertaken, further research would be desirable.



St Mary's of Grandtully kirkyard © HES



Old Kirk at Weem © HES

More systematic study of 17th- and 18th-century ecclesiastical architecture in Perth and Kinross should be a priority. Relatively little research has been undertaken regarding this period, beyond some initial recording and conservation work. Although a degree of information on later alterations to parish churches is contained in the [Corpus of Scottish Medieval Parish Churches](#), the focus of this project was understandably on earlier buildings (Fawcett et al [2009](#)). Consideration of the impact, if any, of shifting ecclesiastical and political loyalties on the design of parish churches and family chapels would be of particular interest. The factors which led to the abandonment of particular sites, and sometimes their later reoccupation, are another important topic.

There is also a need for more research into the sites used by early dissenting groups.

Perth, in particular, was known as a dissenting hotbed. In the late 18th century, there were congregations of Scottish Episcopalians, English Episcopalians, Cameronians, Anabaptists, Burgher seceders,

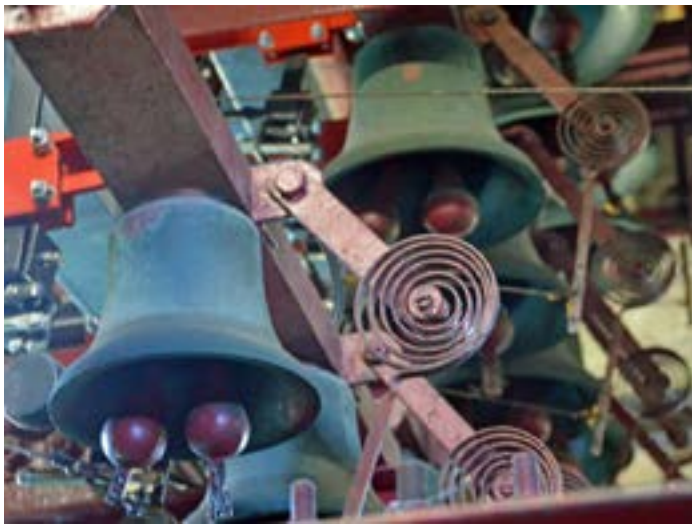


Anti-Burghers, Relief Church, Glasites and a group of independents known as ‘Balchristy People’ (Scott 1796: 533). Although Perth had an especially diverse range of Christian churches, most parishes in the region had a dissenting presence. Written records may well prove key to identifying the locations where dissenters met, which sometimes included barns and private houses. The *Statistical Accounts* frequently provide helpful clues as to the religious make-up of parishes at the end of the 18th and start of the 19th centuries, though the situation in the 1790s could be different from earlier in the post-medieval period.



Roman Catholic ‘tin’ church, Aberfeldy © HES

Current religious trends suggest that the conversion of church sites to other purposes is likely to continue or even to increase. Some of these changes of use are accompanied by major structural alterations, such as the recent removal of the roof at [St Paul’s Church](#) (MPK10383) in Perth. The process of conversion provides a window of opportunity for more detailed physical investigation. Yet time pressures means that the amount of study at this point is sometimes less than ideal. Careful recording before and during alterations therefore needs to be accompanied by a wider programme examining churches not under immediate risk of redevelopment. Although Historic Environment Scotland has undertaken a degree of recording of standing buildings, further research would be desirable, particularly regarding church interiors.



Carillon at St John’s Kirk © Perth and Kinross Heritage Trust

The 19th century was a period of major upheaval in Scottish church architecture. New congregations sprang up across the region, whilst existing church buildings were often abandoned or remodelled. By the end of the 19th century, even relatively small communities frequently had a large number of churches. For example, Aberfeldy had a Church of Scotland parish church, two Free Church congregations with their own buildings, a Congregational church and a [Roman Catholic ‘tin’ church](#) (MPK12521), which was saved from demolition in 2004 (Gifford 2007, 136; Clark 2021, 26).

Many 19th- and early 20th-century churches remain in use for worship today. However, a significant proportion have been converted to other uses or demolished, whilst 15 former churches in the region were on the [Buildings at Risk Register](#) in 2022. Particular attention should perhaps be drawn to the small number of ‘tin’ or corrugated-iron churches still extant in Perth and Kinross. These structures were once relatively common in Scotland, but it is thought that over 90 percent have been lost (Clark 2021, 22).



Collace Mort House © Perth and Kinross Heritage Trust

More research into buildings other than churches used by religious groups, such as church halls and manses, would also be helpful. The 19th century, and to a slightly lesser extent earlier periods, saw

numerous congregations constructing or purchasing buildings in addition to their main church. The roles that these buildings played in the wider community, and the extent to which such ancillary structures show specific denominational features, are among the many questions which deserve greater study regarding religious activity in post-medieval Perth and Kinross.

### *Research Priorities*

PKARF Agenda 8.81: Greater recording of churches and chapels which may experience be at risk of dereliction or change of use.

### *Research Questions*

PKARF Qu 8.115: What factors influence the design of religious buildings in the region?

PKARF Qu 8.116: To what extent is it possible to see particular denominational styles?

PKARF Qu 8.117: What factors drove the abandonment of churches in this period?

PKARF Qu 8.118: What evidence is there for the reoccupation of religious sites?

PKARF Qu 8.119: How did post-medieval communities adapt and use pre-Reformation religious sites?

PKARF Qu 8.120: To what extent are fragments of 17th- and 18th-century churches preserved within seemingly later structures on the same site?

PKARF Qu 8.121: Can we identify the sites used by early dissenting congregations?

PKARF Qu 8.122: Do manses just conform to contemporary fashions in architecture or are there specific features typical of this type of building?

## **8.6 Transport and Movement**

### **8.6.1 Land Routes**

At the beginning of the 17th century, Perth and Kinross already had a complex network of roads and tracks. These ranged from small informal paths to deliberately maintained roads and causeways. Significant research into the locations and oral history of Scottish drove roads was undertaken in the mid-20th century (Haldane [1952](#)). However, physical investigation of these routes in Perth and Kinross has been limited and many questions remain regarding their origins and how long they were in use. Further research into traditional land routes in Perth and Kinross, including the use of drove roads, would be helpful.

It was sometimes thought in the past that ‘no roads were made in Scotland until the seventeenth century’ – a claim that is patently untrue (Moir [1957](#)). Yet, the post-medieval period did see developments in land transport which significantly speeded up travel within Perth and Kinross. A major expansion to the road network took place in the 18th century, after General George Wade’s review of fortifications in the Highlands noted problems with travel between strategic locations, and the period from the late 1720s to the late 1760s saw large-scale construction of roads and bridges (a programme initially overseen by Wade and later by William Caulfeild).

Two major new routes were established through Perth and Kinross – significantly altering the landscape between Dunkeld and Dalnacardoch, and Crieff and Dalnacardoch. Extensive research has been undertaken regarding the routes, bridges and rationale behind both Wade and Caulfeild’s building programmes (Stephen [1936](#); Taylor [1976](#); Curtis [1979](#); Farquharson [2011](#)). However, more research regarding the experience of the ordinary soldiers working on the projects and the impact of the new routes on surrounding communities might be of interest. The Crieff to Dalnacardoch military road has been less affected by road upgrades and improvements than the Dunkeld to Inverness military road, and is mostly surrounded by agricultural land. A combination of metal detecting survey and small-scale test pitting or excavation could be used to try to identify the locations of camps used during the road’s construction.

The new military road network improved connectivity between the Highlands and the rest of Britain. During the late 18th century, the Highlands became an increasingly popular tourist destination, especially as conflict in Continental Europe posed challenges for travel outside of the British Isles. The 18th and early 19th centuries saw numerous travel accounts published which contain detailed descriptions of journeys in Perth and Kinross. Notable accounts include those of Richard Pococke (who travelled here in the 1740s, 1750s, and 1760s), Thomas Pennant (1760s), Barthelemy Faujas de St-Fond (1780s) and James Hogg (1800s). Although these are clearly outsiders’ perspectives on the region, they are an invaluable source of information about the experience of travel in Perth and Kinross, and sometimes describe otherwise poorly documented sites, customs and communities. These texts have received a degree of scholarly attention in relation to themes such as the formation of British identities, but are still underutilised as sources for the landscape and infrastructure of Perth and Kinross (Colbert [2012](#); Smethurst [2012](#)).

The late 18th and early 19th centuries saw further development to the road system with the construction of turnpikes. The modern A90 owes its origins to the turnpike from Perth to Dundee. This transport project was hailed by a late 18th-century minister of St Madoes as 'one of the greatest improvements that has ever taken place in this country' (Black 1792, 574–5). Toll houses were built beside many of these new roads to accommodate the workers who collected money from travellers. Perth and Kinross has numerous surviving toll houses, with over 30 recorded in the region. There are also in excess of 270 milestones, more than in any other Scottish council area. The high density of milestones arguably reflects the historic importance of Perth and Kinross for road transport. Because toll houses, milestones and other remains of the 19th-century road system are frequently close to busy modern routes, they are sometimes in vulnerable locations. Careful monitoring of these monuments to the region's transport history would be beneficial.

The introduction of railways in the mid-19th century revolutionised long-distance travel in the British Isles. Perth and Kinross was not at the forefront of the introduction of rail transport to Scotland, which was pioneered by the waggonways from collieries to the coast. Railways came first to Perthshire as a short link to Coupar Angus from Newtyle in 1841, and only later stretched to make Perth an important transport hub. The region's early rail routes have been quite well-researched and aspects of the infrastructure, designed by Joseph Mitchell among others, still impress. The initial idea that railways could integrate with roads has resulted in the still remarkable severing of two parts of Coupar Angus from each other, although it is now a road that runs along that line.



Remains of railway line at Cairnie Pier © HES

Yet, it was Perth which ultimately became the region's, and arguably Scotland's, premier example of a 'railway junction town'. By the end of the 1860s, railways from Glasgow, Edinburgh, Dundee, Aberdeen, Crieff, Dunkeld and Inverness all converged on Perth (Adams 1978, 113). To create this new transport network, tunnels and cuttings were dug, bridges and viaducts constructed and a host of stations, signal boxes and railway cottages sprang up. Many are still in use today, while others have become redundant to the needs of the modern rail network. The late 20th century saw efforts to record many of these sites (Daniels and Dench 1980; Thomas and Turnock 1989). However, given the continuing pressures on these structures, further recording and monitoring would be desirable. Greater research into the processes by which the railways were built, including the accommodation of navvies and the destruction of pre-existing buildings and transport links, should also be a priority.

Finally, the brief history of Perth's trams should be noted. A horse-drawn tram system opened in Perth in 1895, but was converted to electricity in the early 1900s (Hume 1983, 205). At the end of the 1920s, the tram network was replaced by buses, and the former tram depot on [Perth Road](#) (MPK8658) in Scone now lies under a modern block of flats. Roadworks may well reveal evidence of this form of transport in Perth and its immediate environs.

### *Research Priorities*

PKARF Agenda 8.84: Research into traditional land routes in Perth and Kinross in the 17th and 18th centuries.

PKARF Agenda 8.85: Greater study of post-medieval travellers' accounts, including consideration of how they can elucidate the physical evidence from the region.

PKARF Agenda 8.86: Research into the physical evidence left by the turnpikes in the region.

PKARF Agenda 8.87: Further recording and study of the region's unusually large number of milestones.

PKARF Agenda 8.88: Study of the physical evidence for the construction of the railways and the impact on surrounding communities.

PKARF Agenda 8.89: Research into Perth's former tram network.

### *Research Questions*

PKARF Qu 8.127: What can we discover about traditional land routes in Perth and Kinross in the 17th and 18th centuries? How were they affected by the construction of the military road network?



PKARF Qu 8.128: Can we physically identify camp sites used during construction of the military road network?

PKARF Qu 8.129: How did the growth of tourism in the 18th and 19th centuries affect the region?

PKARF Qu 8.130: What physical remains survive from the turnpike network?

PKARF Qu 8.131: What can we learn from the milestones of Perth and Kinross?

PKARF Qu 8.132: What can we discover about the ways in which the railways were constructed?

PKARF Qu 8.133: What physical reminders are there of Perth's former tram network?

## 8.6.2 Bridges, Fords and Ferries

For several decades now, the post-medieval bridges of Perth and Kinross have attracted a degree of scholarly interest (Curtis [1979](#); Ruddock [1984](#)). More than 390 bridges are listed in the Historic Environment Record for the region, with the vast majority being stone arches from the post-medieval period. In particular, the 18th-century military bridges have been the subject of a major research and conservation project led by Perth and Kinross Heritage Trust. As well as being interesting structures, bridges also provide invaluable clues as to the nature of early modern road transport, including the use and size of wheeled vehicles. The importance of bridges is widely acknowledged, although maintenance issues and road traffic incidents can sometimes lead to damage. More research into the relationship between extant post-medieval bridges and earlier crossing points such as fords and timber bridges could be beneficial.



Telford's Bridge in Dunkeld © Perth and Kinross Heritage Trust

During the early 19th century, new forms of bridge were introduced. The work of the Justice family of blacksmiths, who were based in Dundee and (briefly) in Perth, would repay study. During the 1810s, 1820s and 1830s, John Justice and his son James made innovative wrought-iron stayed and suspension bridges, for places such as Haughs of Drimmie and Crathie. Overlooked fragments of other iron bridges may exist. Meanwhile, the 20th century saw the introduction of reinforced concrete bridges. Realignment of the A9 has left behind some important 1920s reinforced concrete bridges by Sir E. Owen Williams at sites such as Dalnamein. Greater study of the region's early concrete bridges could be of interest.

In comparison to bridges, ferries are very under-researched. Currently, the recording of post-medieval ferry sites in Perth and Kinross has been limited; they are usually only included in the Historic Environment Record where obvious structures like ferry cottages still survive. Yet ferries were fundamental to how communities were connected, are frequently mentioned in written sources and are marked on some historic maps. They also feature in a number of current place names, such as Ferryfield of Carpow. Systematic study of ferry sites in Perth and Kinross, which integrates written records with field survey, should be a priority. A carefully managed programme of metal detecting in the vicinity of ferry sites might also be productive.

### *Research Priorities*

PKARF Agenda 8.90: Recording and study of post-medieval ferry sites in Perth and Kinross.

PKARF Agenda 8.91: Research into the relationship between post-medieval bridges and earlier crossing points.

### *Research Questions*

PKARF Qu 8.134: Where were ferries located in Perth and Kinross? When were they used? How do they relate to wider transport networks?

PKARF Qu 8.135: To what extent were post-medieval bridges constructed at or near earlier crossing points?

PKARF Qu 8.136: What can we discover about 17th- and 18th-century bridges beyond the military road network?

PKARF Qu 8.137: Investigation of the fabric (e.g. wrought-iron links, reinforced concrete methods) of unusual bridges.

### 8.6.3 Harbours and Waterways

The post-medieval period saw a significant expansion in the transport of goods and people by water. In Perth and Kinross much of this activity focused around the River Tay. The 18th and 19th centuries saw the construction of several stone piers in small harbours along the Tay, such as [Inchyra](#) (MPK3337), [Kingoodie](#) (MPK5107) and [Port Allen](#) (MPK4693). These harbours were briefly surveyed in the mid-20th century, but further study would be of interest (Graham [1969](#)). Most of the existing research has focused on stone structures. There is potential for further study of harbour masonry, as well as investigation into the remains of wooden structures, particularly in the intertidal zone of the Tay.



Inchyra Pier © HES



Inchyra Pier © HES

Perth was, and is, the only major port in the region. During the 17th and 18th centuries, Perth's main harbour was located near what is now the junction of [Tay Street](#) and Canal Street (MPK3401). Part of this area was excavated in the 1980s before the construction of new housing (Bowler [2004](#), 21). During the 1830s and 1840s, a new harbour was constructed a little downriver of Perth at [Friarton](#) (MPK3463), which remains in use today. Extensive plans and written records are preserved in the National Library of Scotland and Perth and Kinross Archives regarding its construction.

The 19th and early 20th centuries saw extensive dredging of the River Tay. In the 1840s it was noted that the Tay between Perth and Newburgh had recently been 'dredged and deepened' and 'the banks of the river... in many places excavated and removed' (Marshall and Adamson [1849](#), 456–7). This brought significant changes to the layout of the Tay, leading 'the islands of Sleepless, Darry, and Balhepburn' to be 'connected with the mainland by embankments formed of the produce of the dredging' (Marshall and Adamson [1849](#), 457). Much of the dredging of the Tay was driven by a wish to make the river more navigable. However, dredging also took place to extract sand and gravel for construction projects in the region, with the main centres for this industry at Perth and Dundee. Further study of the impact of dredging on the River Tay would be beneficial.

The late 19th century was characterised by increasing use of waterways for recreational purposes. Steamers operated on the River Tay and on Loch Tay; the history of steamers on Loch Tay was probably ended by the Second World War. More research into this aspect of the region's past would be of interest. Additionally, a significant number of small jetties and boathouses were built during the 19th and early 20th centuries for the use of private pleasure boats. These structures have received little study in Perth and Kinross and are often poorly recorded.



Steamer on Loch Tay © Clyde River Steamer Club

### *Research Priorities*

PKARF Agenda 8.92: Research into the smaller harbours on the River Tay.

PKARF Agenda 8.93: Further interdisciplinary study of the development of Perth's harbours during the 17th, 18th, and 19th centuries.

PKARF Agenda 8.94: Study of the use of waterways for recreational purposes, (especially during the 19th and early 20th centuries).

### *Research Questions*

PKARF Qu 8.138: What can we discover about smaller harbours on the River Tay? What structures survive? When and how were these landing points used?

PKARF Qu 8.139: How were Perth's harbours used before the 19th century?

PKARF Qu 8.140: To what extent does the current Perth Harbour preserve 19th-century structures?

PKARF Qu 8.141: What can we discover about the recreational use of waterways in the region?

### 8.6.4 Migration

The post-medieval period saw significant movement of people into, out of and within Perth and Kinross. There has in recent years been extensive research into the Scottish diaspora of the 17th, 18th and 19th centuries. However, more consideration of the specific regional experience of Perth and Kinross, probably primarily based on written records, could be helpful.

The political and economic disturbances of the 18th and 19th centuries encouraged significant movement within Perth and Kinross. Over the course of the 18th century, the population of Perth increased from 4,000 to around 19,000 people; much of this growth was driven by migration from rural areas (Whatley 2011, 42). While a proportion of the incomers were from lowland areas, there was a significant influx from upland, often Gaelic-speaking, communities. A degree of historical research has been undertaken into the Highlanders who relocated to Perth (Withers 1986). However, further consideration of the extent to which this movement of people can be traced in the archaeological record could be beneficial. Research into movement between smaller centres of population would also be interesting, although this is likely to have more challenges in terms of the surviving evidence.

Perth and Kinross also saw inward migration – especially during the 19th century. From the 1840s onwards, a significant Irish community developed in

Perth, particularly in the area around Meal Vennel, which became popularly known as the 'Irish Channel' (Schnitker 2007, 8). Interdisciplinary research into the experience of this immigrant community and whether any differences in living conditions are discernible in the material culture could be of interest.

Further study is needed of people who did not follow a settled lifestyle. Perth and Kinross has historically had significant connections to travelling communities, particularly around Blairgowrie and Pitlochry. For most of the post-medieval period, traveller communities faced extensive discrimination. However, they also played important economic roles, particularly in relation to seasonal work such as fruit picking. The temporary nature of the occupation of traveller sites means that their impact on the landscape may be less obvious, but work to understand what physical traces these communities have left behind should be a priority. Recent years have seen efforts to record and study the oral history of Scottish travellers – a form of evidence that is particularly important for many itinerant communities. Interdisciplinary study linking oral, textual and physical evidence is likely to prove key to studying the experience of travellers in post-medieval Perth and Kinross.

### *Research Priorities*

PKARF Agenda 8.95: Interdisciplinary study of patterns of migration into, out of and, and within Perth and Kinross in the post-medieval period.

PKARF Agenda 8.96: Research into the Irish community in Perth in the 19th century.

PKARF Agenda 8.97: Greater study of travelling communities in the region.

## 8.7 Conflict

### 8.7.1 Fortifications and Military Structures

The post-medieval period saw a transformation in the design of fortifications built in Perth and Kinross. At the beginning of the 1600s, most defensive structures in the region were broadly medieval in design, with tower houses remaining popular as symbols of lordship and strong-points in times of political instability. Although Renaissance style artillery defences were constructed in the Scottish Borders and along the east coast during the mid-16th century, the gunpowder revolution only had a minimal impact on the type of fortifications present in Perth and Kinross before James VI departed for England in 1603. However, during the 17th and 18th centuries, the military architecture of the region began to reflect the changed situation brought about by artillery weapons.



During the 1650s a new [Cromwellian Citadel](#) (MPK3478) was built to the south of Perth by General Monck. This was a modern artillery fort with angled bastions and not unlike other garrison forts Cromwellian armies built at Ayr, Leith, Inverlochy and Inverness. The citadel at Perth was gradually demolished in the decades after 1745. However, basic plans of the defences are shown on the military maps of Perth created by [Lewis Petit](#) in the 1710s and by [Jasper Leigh Jones](#) in the 1740s. The south-west bastion of the Cromwellian citadel at Perth has been excavated, although more investigation in the vicinity of the former fort could be beneficial (Roy 2002). The construction of the citadel had a marked effect on the local townscape as it reused stone from surrounding buildings. Equally, the demise of the citadel was an opportunity for local residents to quarry for materials. Further artillery defences were constructed around the burgh of Perth during the Jacobite rising of 1715. Petit's plans of these structures survive. Surprisingly limited physical evidence has been found of the Jacobite defences at Perth (MPK15242; Bowler 2004, 63). This might reflect loss, or could be because Petit's plan represented an aspiration rather than what was actually built. When the opportunity arises, careful investigation of sites which may lie on the line of these fortifications should be a priority.



Excavations of the Cromwellian Fort, taken from the SSW © Perth and Kinross Heritage Trust

The instability of the 17th and 18th centuries led to numerous troops in Perth and Kinross. These were housed in a mix of purpose-built barracks and adapted older buildings, such as the now demolished [Gowrie House](#) (MPK3501) in Perth. In Coupar Angus [Cumberland Barracks](#) (MPK11162) still survives, and underwent conservation earlier this century. This site was used by government forces in 1745, although when the building was actually constructed is unclear. Further research into this significant standing building would be desirable. Better understanding of the site of the 18th-century [Rannoch Barracks](#) (MPK11799) at Bridge of Gaur would also be beneficial. The modern big house of the same name is a later structure built near the original barracks.



Cumberland Barracks, Coupar Angus © Perth and Kinross Heritage Trust

There is a need for more study of troop movements in Perth and Kinross during the 17th and 18th centuries. Many questions remain about issues such as the sites used by soldiers during the construction of the military road network, or locations of camps used by both sides in 1745. While written records are likely to be integral to researching these topics, field survey of relevant sites and test pitting could also be helpful. At present we have a very limited understanding of to what extent more transitory post-medieval military activities left a physical trace in the landscape of Perth and Kinross.

By the end of the 18th century, the decreasing likelihood of rebellion in Scotland meant that Perth and Kinross lost much of its strategic significance. As a result, fewer efforts were made to fortify sites in the 19th century. However, troops were still based in the region. From the 1790s to the 1960s

there were barracks at [Perth](#) (MPK10216) near the road now known as Barrack Street. In the 1880s this site became the regimental depot for the Black Watch. Although these barracks were demolished in the 20th century, boundary markers still survive and have been recorded by Historic Environment Scotland. During the mid-19th century, another barracks (MPK10409) was located on the north side of [Victoria Street](#) in Perth, between James Street and Scott Street. Thus far, very little research has been undertaken into this site. The period after the ending of the Crimean War in 1856 saw a notable expansion in volunteer units. This led to the creation of several local training sites, such as rifle ranges and drill halls. Many of these buildings and outdoor spaces also served other purposes, and more documentary and physical study to identify locations used by volunteer units would be desirable.



Cultybraggan POW camp © HES



18th century military road, Glen Shee © Perth and Kinross Heritage Trust

In the early 20th century, the two World Wars increased military activity across most of Scotland, including Perth and Kinross. The *World War One Audit of Surviving Remains* undertaken by RCAHMS and Historic Scotland provides a helpful overview of military sites from this period. An important study of the archaeology of the Scottish Command Line, a series of major anti-tank 'stop-lines' from 1940 has also been carried out (Barclay [2011](#)). However, some less obvious remains, such as First World War practice trenches, may have been overlooked. Drill halls, hospitals and prisoner of war camps make-up a large proportion of the 20th century sites with military associations in Perth and Kinross, and the degree of study they have received is very variable. The prisoner of war camp at [Cultybraggan](#) (MPK9217) is a particularly well-preserved example of a Second World War prison camp and has considerable potential for research and public engagement activities.



Buildings at Cultybraggan POW camp © Perth and Kinross Heritage Trust

It should be noted that military activity in Perth and Kinross during the 20th century was not restricted to British forces. During the Second World War, the region hosted important parts of the Polish Army, including the headquarters for the Polish 1st Corps and the training ground for what would become the 1st Polish Armoured Division (Maresch [2006](#); Wawer and Suchitz [2006](#); Connelly [2016](#)). Recent years have seen worthwhile projects intertwining oral history with documentary and physical evidence about sites



associated with Polish troops. The Canadian Forestry Corps and the Norwegian Army were also active in Perth and Kinross during the Second World War. The Norwegian camp at [Dall](#) is a particularly interesting site and there has been some documentary research into its history (MPK17723; Aanensen [1974](#); Fjaerli [1982](#)).

There were several First and Second World War military airfields in Perth and Kinross. In the Second World War at least 11 aerodromes or landing strips in the region were deemed to have a military significance (G Barclay, pers comm). While some of these sites, such as the First World War airfield at [South Kilduff](#) (MPK18541), have few visible remains, others have substantial surviving structures, often in poor repair. Further consideration of how best to study and preserve these sites should be a priority. The region was also the scene of several aircraft crashes, with six crash sites noted in the Historic Environment Record. Some of these locations have since had memorials erected, such as the stone and tree at Fearnan which commemorates four airmen (three Russian and one Czechoslovakian) who died there in 1943.

The introduction of aeroplanes made areas much further from the frontline at potential risk of attack. Britain already had an established air-raid precautions system by the outbreak of the Second World War (Simey and Williams [1939](#); Baker [1978](#); Greenhalgh [2017](#)). In urban areas, local air-raid warden posts often took the form of windowless concrete buildings, sometimes erected in small open spaces or even backyards. We currently have limited knowledge about these sites in Perth and Kinross.

Oral history may be one route into studying their location, although individual air-raid shelters, such as Anderson Shelters, are unlikely to have survived. However, it would be interesting to know the extent to which people felt it necessary to build these in the region, and again local reminiscences may prove helpful (Taylor [2010](#)).

The mid and late 20th century saw increasing concern about nuclear war. Planning for a possible nuclear war was undertaken in much greater secrecy than earlier military activity. Many of the written records associated with this period have only recently been released and others may still be restricted. Partly because of their recent military sensitivity, there has been little study of the physical remains from the Cold War in Perth and Kinross. Files from the Royal Observer Corps, held in the National Archives at Kew, reveal that the ROC had several sites in Perth and Kinross, which were probably intended to assist with the reporting of nuclear detonations and the mapping of radioactive fallout. Further research into the Cold War preparations for nuclear conflict, including arrangements for local government, civil defence and air defences would be beneficial. The preparations that private individuals undertook in case of nuclear conflict is also a topic of interest, and at least one privately built nuclear bunker was created in the region at [Birnie House](#) (MPK17058).

HER/Canmore ID	Place/Site	NGR	Crash
MPK15246	British Albermarle P1503 Crash Site, Fearnan	NN 7238 4506	29 May 1943
MPK15247	RAF Sea Hawk WF224 Crash Site, Oldwood Farm	NO 2300 2520	Date and exact crash site unknown
MPK17585	<a href="#">Airspeed Oxford I: Loch Laidon</a>	NN 3562 5327	2 March 1942
MPK18207	<a href="#">Hawker Hurricane I: Loch Leven</a>	NO 1400 0100	16 April 1943
MPK18208	<a href="#">Hawker Hurricane I: Loch Leven</a>	NO 1400 0100	7 March 1943
MPK18221	<a href="#">Miles Master I: River Tay</a>	NO 2800 2100	17 February 1944

Table 8.6 Sites of Aircraft Crashes in Perth and Kinross (data from Historic Environment Record)



## Research Priorities

PKARF Agenda 8.98: Further research into Perth's 17th- and 18th-century defences.

PKARF Agenda 8.99: Investigation of the sites used as barracks in the 18th and 19th centuries.

PKARF Agenda 8.100: Study of sites used by volunteer units during the 19th and early 20th centuries.

PKARF Agenda 8.101: Greater study of monuments associated with the Second World War Two (, many of which are deteriorating and may face demolition in the near future).

## Research Questions

PKARF Qu 8.147: What physical evidence survives from Perth's defences?

PKARF Qu 8.148: What can we discover about life in the region's barracks during the 18th and 19th centuries?

PKARF Qu 8.149: What sites were used by volunteer units during the 18th and 19th centuries?

PKARF Qu 8.150: How can we most appropriately study and preserve the wealth of 20th-century military sites in the region?

PKARF Qu 8.151: What can further recording and analysis of the network of 18th-century military roads and bridges, and their associated structures, tell us about the period?

PKARF Qu 8.152: What can detailed survey of Second World War defences and buildings, notably Cultybraggan POW camp and surviving airfield structures, tell us about the period?

PKARF Qu 8.153: Second World War structures are increasingly rare and often considered for full- scale demolition – is there anything beyond standing building recording that should be considered prior to demolition?

### 8.7.2 Battlefields and Sites of Conflict

Perth and Kinross witnessed extensive military activity in the 17th century. Significant battles took place during the Wars of the Three Kingdoms in the 1640s and following the deposition of James VII at the end of the 1680s. The region has three post-medieval battlefields registered in Historic Environment Scotland's *Inventory of Historic Battlefields*: Tippermuir (1644), Killiecrankie (1689) and Dunkeld (1689).

[Tippermuir](#) (MPK2168; [BTL39](#)) has the dubious claim to fame of being the first battle in the War of the

Three Kingdoms to have been fought in Scotland. It took place near to the modern village of Tibbermore and was the first victory by the Marquess of Montrose on behalf of Charles I. Today most of the presumed battlefield site is arable land (Historic Environment Scotland [2012](#)). There has been no modern archaeological investigation on the battlefield, although in the early 19th century the *New Statistical Account* claimed that it was 'no uncommon thing' for local residents to find 'gun bullets, broken spurs, and many other memorials' (Tulloch [1845](#), 1031).



Plaque on Needless Road, Perth, Scotland, commemorating those who were killed while retreating from the Battle of Tippermuir © Becky Williamson (CC BY-SA)

However, military activity was not restricted to set-piece battles. The movement and encampment of successive armies during the Wars of the Three Kingdoms will have had an impact on the landscape of Perth and Kinross. Indeed, at times lands were deliberately laid waste. For instance, in 1645 the forces of the Marquess of Montrose burnt the Campbell estates at Breadalbane beside Loch Tay. Evidence of such destruction in the archaeological record would be of considerable interest.

The fighting in 1689 in Perth and Kinross has received a degree of archaeological attention.

The area to the north of the pass where the [Battle of Killiecrankie](#) (MPK5256; [BTL12](#)) took place has been investigated twice this century, both as part of the *Two Men in a Trench* television programme and before the widening of the A9 (Pollard and Oliver [2003](#); Kilpatrick and Bailie [2017](#)). The effective use of metal detecting, with accurate recording, has produced a significant distribution of battlefield artefacts, such as musket balls and belt fittings, from Killiecrankie.



17th century Cavalryman's buff coat © Perth Museum and Art Gallery

Dunkeld (MPK17972; [BTL32](#)) saw bitter fighting about a month after Killiecrankie, and [Dunkeld Cathedral](#) (MPK2445) is still pock-marked with musket ball impacts from this time. Houses and garden walls were used as defensive positions, and many of the buildings in Dunkeld were ultimately burnt. Dunkeld is particularly interesting as an example of fighting in an urban environment – something that was extremely unusual in post-medieval Scotland. Further archaeological investigation of this aspect of Dunkeld's past could be of great interest. Much of the 17th-century settlement at Dunkeld was not far from the cathedral and today is largely not built upon; geophysical survey of this area suggests that there are surviving archaeological features (Kellogg and Jones [2006](#)).

The 18th century saw no major set-piece battles in Perth and Kinross. However, the region was not spared conflict. The burgh of Perth experienced a significant period of occupation by Jacobite forces during 1715 and 1716. Meanwhile, in November 1715 the burghs of Crieff and Auchterarder were burnt by Jacobites returning from the Battle of Sherrifmuir. It seems likely that these destructive incidents will have left a trace in the archaeological record.

The 1745 Jacobite rising brought further disruption to the region. The burgh of Perth again experienced Jacobite occupation, though no actual fighting, and it was in Perth that in September 1745 Charles Edward Stuart publicly claimed the throne in the name of his father. The region was also affected by the later stages of the rising. In the spring of 1746 [Blair Castle](#) (MPK5500) was unsuccessfully besieged by Jacobite forces – the last time a castle in mainland Britain was besieged. Blair Castle and its surroundings have undergone significant changes since the 18th century, but the use of artillery during the siege means that physical investigation of relevant locations could perhaps be worthwhile.

#### *Research Priorities*

PKARF Agenda 8.102: Interdisciplinary investigation into the battlefield at Tippermuir.

PKARF Agenda 8.103: Research into the impact that conflict in the 17th and 18th centuries had on communities in Perth and Kinross.

#### *Research Questions*

PKARF Qu 8.154: How can we best preserve and manage battlefield sites?

PKARF Qu 8.155: What physical evidence is there for the Battle of Tippermuir?

PKARF Qu 8.156: Can we find evidence of destruction during the 17th century on the sites around Loch Tay?

PKARF Qu 8.157: Can we identify archaeologically the camp sites of 17th- and 18th-century military forces?

PKARF Qu 8.158: In what ways could improved national guidance enhance regional decision-making in the planning process?

### 8.7.3 Weapons and Military Equipment

Like many regions of Scotland, Perth and Kinross has a significant corpus of post-medieval weapons and military equipment. These items are scattered across public and private collections and have received vastly varying degrees of study. The Black Watch Museum at [Balhousie Castle](#), Perth Museum and [Blair Castle](#) all house notable military collections; Blair Castle has numerous weapons on display which were reputedly used at [Culloden](#).

Information about the provenance of post-medieval military items can be problematic. However, comparative study of these artefacts could provide helpful insights into the military history of the region. More systematic analysis of the weapons and equipment already held in the region's museums and private collections would be desirable. Given the popularity of military memorabilia, such research might be of interest to a broader audience than heritage professionals and academics.

The popularity of metal detecting means that stray finds of military equipment are likely to continue. Many of these items, such as musket balls, are at present not deemed of great significance. However, it is important that we continue to track and monitor these find-spots as seemingly 'common' objects can provide important clues about military activity, even on occasions leading to the identification of battlefields, and positions of troops (Ferguson [2013](#)). The relatively extensive protection given to archaeological material by Scottish Treasure Trove legislation means that a degree of information about these stray finds is recorded, yet much more could be done to look at the broader patterns these seemingly isolated objects may reveal.

#### *Research Priorities*

PKARF Agenda 8.104: Systematic study of surviving post-medieval weapons and military equipment from Perth and Kinross.

PKARF Agenda 8.105: Further study of stray finds and efforts to discern patterns in their distribution.

#### *Research Questions*

PKARF Qu 8.159: What can we learn from the extant post-medieval weapons and military equipment from the region?

PKARF Qu 8.160: To what extent do stray finds point to overlooked aspects of military activity in the region?



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