ScARF Scottish Archaeological Research Framework

Perth and Kinross Archaeological Research Framework

Chapter 1. Introduction

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Abbreviations

ALGAO — Association of Local Government Archaeological Officers

FAME — Federation of Archaeological Managers and Employers

HER — Historic Environment Record

HES — Historic Environment Scotland

LCAs — Landscape Character Assessments

LCT — Landscape Character Types

LDP — Local Development Plans

LiDAR — Light Detection and Ranging

LUP — Late Upper Palaeolithic

LVIA — Landscape and Visual Impact Assessment

MPGS — Main Postglacial Shoreline

NMRS — National Monuments Record for Scotland

NMS — National Museum of Scotland

NPPG — National Planning Policy Guideline

NRHE — National Record of the Historic Environment

OPIT — Our Place in Time

OS — Ordnance Survey

OSA — Old Statistical Account

PAN — Planning Advice Note

PKARF — Perth and Kinross Archaeological Research Framework

PKHT — Perth and Kinross Heritage Trust

PMAG — Perth Museum and Art Gallery

PSAS — Proceedings of the Society of Antiquaries of Scotland

PSNS — Perthshire Society of Natural Science

RCAHMS — Royal Commission on the Ancient and Historical Monuments of Scotland (now HES)

SAS — Scotland's Archaeology Strategy

ScAPA — Scotland's Archaeological Periods and Ages

ScARF — Scottish Archaeological Research Framework

ScRAP — Scotland's Rock Art Project

SDD — Scottish Development Department

SERF — Strathearn Environs and Royal Forteviot

SMR — Sites and Monuments Records

SNH — Scottish Natural Heritage

STUA — Scottish Trust for Underwater Archaeology

SUAT — The Scottish Urban Archaeological Trust

TAFAC — Tayside and Fife Archaeological Committee

TayLP — Tay Landscape Partnership

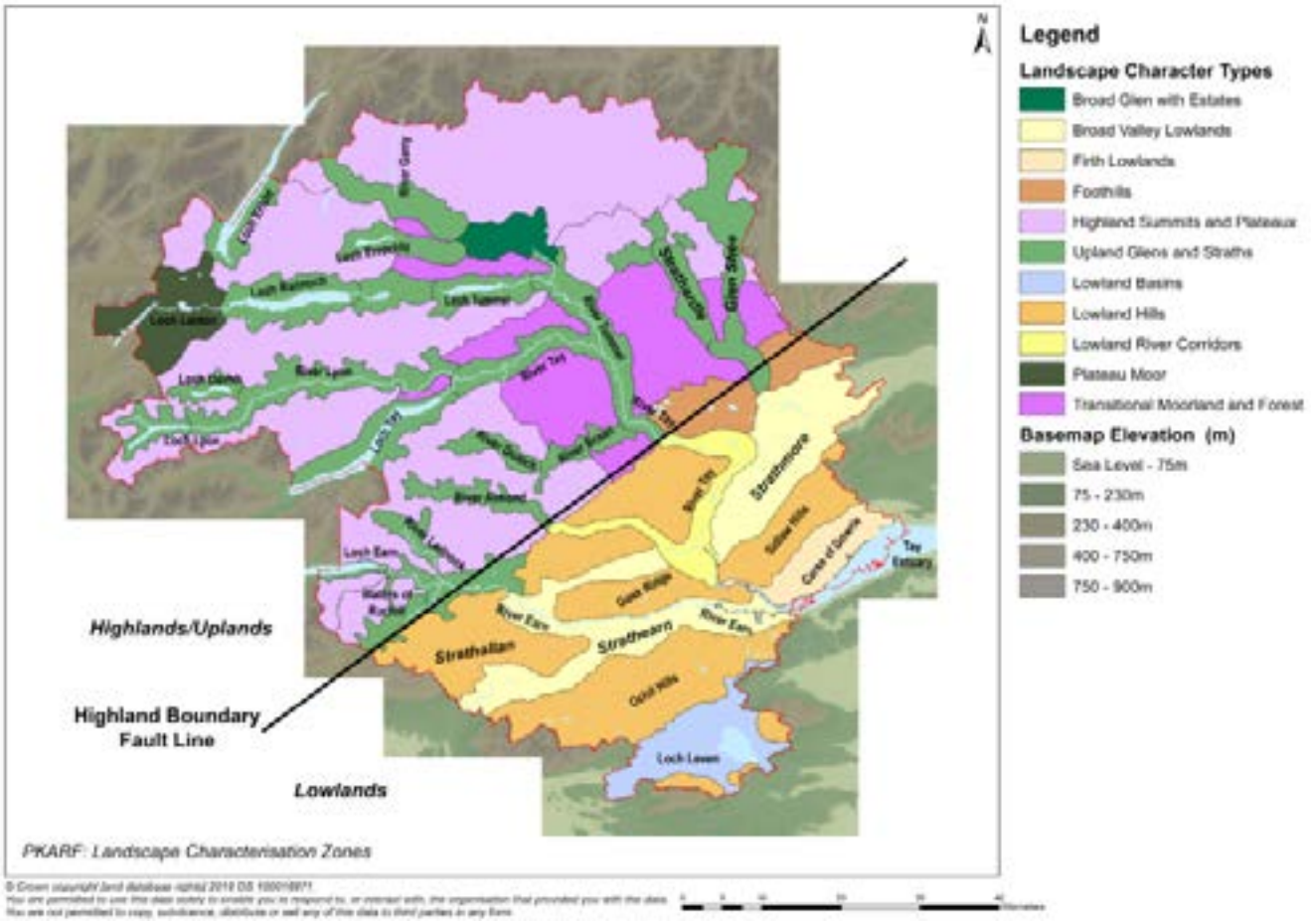
1.1 Background and Focus

The Perth and Kinross Archaeological Research Framework (PKARF) deals with the local authority area of Perth and Kinross, in the heart of Scotland. Apart from the Tay corridor, it is land-locked and covers around 5,286 square kilometres. It is the fifth largest unitary authority in Scotland, bordering the Aberdeenshire, Angus, City of Dundee, Fife, Clackmannanshire, Stirling, Argyll and Bute and Highland council areas. The underlying geology of the area has resulted in the broad geographical division of the Highland and Lowland zones, divided by the Highland Boundary Fault. Both contain a wide range of landscape types, each of which contain varied topography, vegetation and land use. These rich and varied landscapes have been the primary influence on human settlement and activity over the last 14,000 years (Strachan 2011, 2–11). How best to focus future research into the physical remains of this activity is the overriding aim of the framework.

Perth and Kinross has seen several outstanding programmes of archaeological research over the last 100 years. While most of this research has been thematically based, planning and infrastructure projects over the last 30 years have both increased fieldwork and focused work geographically on development sites. This activity has not been evenly distributed across the region, however; it has largely taken place in areas of modern settlement and with greater emphasis on the lowlands. The

last decade has seen this bias alleviated, to some degree, through, for example, wind farms and major infrastructure projects, and the emergence, or arguably re-emergence, of community-led research.

to make the historic environment an educational tool and an asset that enriches people's lives and strengthens community through a sense of place and identity.



Landscape Character Types and the main geographical placenames used © PKHT

The national Scottish Archaeological Research Framework (ScARF 2012) assessed what was then known about Scottish archaeology as a whole and made recommendations for areas of future research. The value of greater geographical resolution was soon recognised, however, and in March 2017 Historic Environment Scotland (HES) hosted a symposium to outline the delivery of regional frameworks. In 2018, Perth and Kinross Heritage Trust (PKHT) began to develop PKARF. The overarching aim has been to assess current knowledge of human activity through the archaeological record, and from this benchmark, identify knowledge gaps and establish research priorities and questions. The intended use of the PKARF is to inform effective future management of the archaeological resource, and guide ongoing and future research, whether developer, academic or community led. The framework also aspires to help

At the time of writing (July 2022) the Perth and Kinross Historic Environment Record (HER) contains information on 12,129 archaeological sites and finds, not including records held by Perth Museum, and there are an estimated 15,000 pre-1919 historic buildings and structures. Only a small percentage of this finite asset are protected through designations, however: 677 Scheduled Monuments, 41 Gardens and Designed Landscapes, 4 Designated Battlefields, 3,551 Listed Buildings and 36 Conservation Areas. The vast majority rely on good stewardship by owners, including the local authority, and protection through the relevant planning legislation. The HER is the key tool in the management of sites through the latter, and the current knowledge base which informs decision-making around that process. In terms of wider research, the HER is complemented by several national datasets,

primarily including Historic Environment Scotland's Pastmap and Canmore databases, and the extensive archives held in the National Record of the Historic Environment (NRHE).

This introduction provides landscape context for the area and a brief history of research before around 1990, followed by a more detailed account of work over the last 30 years through development-led archaeology, the Treasure Trove system and community archaeology. An outline of the project's aims, methodology and policy context is then followed by notes on the document's structure, chronological and geographical terms and monument types used, and the use of radiocarbon dates.

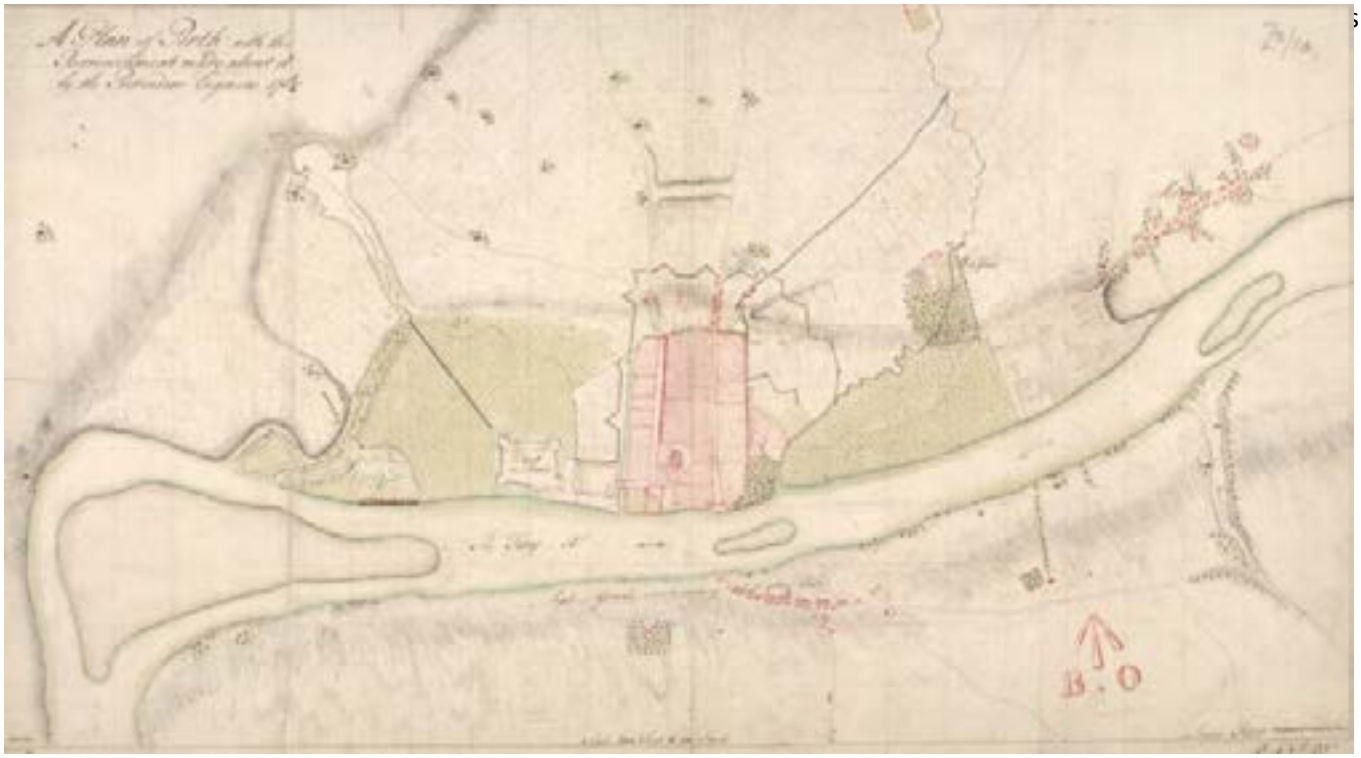
1.2 Geographical and Landscape Context

The Perth and Kinross area includes two of Scotland's major geological features: the Grampian Highlands and the East Central Lowlands of the Midland Valley. The Highland Boundary Fault divides these into the area's Highland and Lowland zones, with differences reflected in topography, vegetation and land use. Both are characterised by a diverse mix of rural and urban land use, which varies considerably from rich lowland arable farming to extensive upland forestry, and from the main population centre of Perth to small, remote communities, such as Kinloch Rannoch. More detailed information can be found in the Perth and Kinross State of the Environment Report (Perth & Kinross Council 2007) and for past land use through the Historic Land Use Assessment Map.

The topography of the region is largely the product of glacial processes acting upon varying underlying geology. To the south of the Highland Boundary Fault, broad, flat, fertile straths correspond with the areas of soft sandstone eroded during glaciation. The fertile soils that now cover these areas are the result of glacial drift deposits and eroded material carried down by rivers from the Highland glens. The post-glacial raised beaches of the Carse of Gowrie contain some of Scotland's richest farmland; however prior to drainage for the agricultural improvement, it was wetland formed on uplifted marine clay. The flooded Lowland Basin of Loch Leven was formed where the retreating ice sheets of the last Ice Age scoured a hollow in the softer sandstone between the harder Lomond Hills, Cleish Hills and Ochils. The land surrounding the loch is flat with extensive areas of marsh and wetland and an area of valley peat at Portmoak at the foot of the Lomond Hills.

Uplands and lowlands in Perth and Kinross dominated by Schiehallion © HES

North of the Highland Boundary Fault, generally harder stone, metamorphosed from sedimentary rocks, have resulted in higher elevations, despite being subject to similar glacial processes. Much of this area is covered in either moorland or blanket bog and less fertile soils. However, where upland glens have been created or enlarged by glaciation, more fertile soils occur on drift deposits which support agriculture. Around Atholl, the landscape changes from the open moorland to a large valley landform with glacially steepened sides enclosing the predominantly flat, open floodplain of the River Garry. Here, the less resistant calcareous limestone has led to distinctly different soils and vegetation, notably forests of large trees and fertile farmland around the Blair Castle Estate. At the western end of Loch Rannoch is an area of blanket mire on a large open flat plateau which forms Rannoch Moor, one of the best examples of a blanket peat bog in Scotland. It preserves the stumps of many deciduous trees gradually consumed as the bog developed under the cool post-glacial conditions that have prevailed since the last Ice Age. The rivers and lochs have also played a key role in influencing human settlement. Foremost of these, draining much of the uplands with a catchment area of around 5,000 square kilometres, is the River Tay, Scotland's longest river and the largest in Britain in terms of freshwater discharge. It is fed by over 70 freshwater lochs and seven other



Petit's 1715-1716 A Plan of Perth with the Retrenchment made about it by the Pretenders Engineers 1715/16 © National Library of Scotland

significant rivers including the Earn, Almond, Tummel, Garry and Isla. The area's major lochs (Rannoch, Tummel, Earn and Lyon) are predominantly oriented east–west, with the Ericht and Tay oriented south-west to north-east.

Scotland's landscape character has been mapped through regional Landscape Character Assessments (LCAs), covering local authority areas. Commissioned by Scottish Natural Heritage (SNH – now NatureScot), these underpin our understanding of the landscape and are used for natural heritage and planning policy making, and development planning. They provide baseline information for Landscape and Visual Impact Assessment (LVIA) for developments such as wind farms, housing and infrastructure, afforestation and mineral extraction. Landscape Character Types (LCTs) are homogenous types of landscape defined as 'areas of consistent and recognisable landscape character'. In Perth and Kinross these range from the rugged massif of the Highland Summits and Summits and Plateaux of the Cairngorms and Tayside, to the lowland hills, river corridors and basins with straths and valleys in between. They are shown in Figure 1 along with the names of the main rivers, lochs, hill-ranges, straths and glens, as referenced throughout and a digital map of Scotland can be found at nature.scot.

The most significant geographical division in the area is between the Highland and Lowland zones, and this is considered as an overriding research theme in each chapter. Use of these terms is not intended to automatically imply cultural division in the past, nor is it used as a shorthand for monument survival, resulting in variation in subsequent land use, as proposed by Stevenson (1975). Rather it is simply a recognition that the geology, topography and soils of these areas must have resulted in similar variation in agricultural practices as exist today. The extent to which these variations in prehistory resulted in cultural differences, as witnessed in the post-medieval period (PKARF Post Medieval section), is one aspect of research that the framework as a whole should explore, and for which the area is well placed to address.

1.3 A brief history of research to around 1990

The 17th–18th centuries: early mapping and the first antiquarians

Some of the earliest descriptions of archaeological sites in the area are of the exceptionally well-preserved Roman military sites, such as Ardoch fort. While the earliest are from the 16th century, they are predominantly from the 18th century on. Fundamental to early study of the area was the establishment of the Perth Literary and Antiquarian Society in 1784, which operated until the early 20th century. Its members were particularly interested in history and antiquities, literature (especially Gaelic), natural sciences, foreign curiosities and fine arts. They compiled an archive of its antiquarian research, including an early research agenda, and a collection of mainly chance discoveries. That collection and the Society's other endeavours formed the first iteration of what became the present-day Perth Museum and Art Gallery, where the surviving archives and collections remain (Taylor 1984; Allan 2002 and 2003).

The development of increasingly accurate and detailed mapping over these centuries also played a key role in the early recording of sites, and in improving understanding of them. The surviving maps of the period are an invaluable resource today, offering insight into now-lost sites and to how sites have changed over time. The late 16th century maps by Timothy Pont are the earliest and while coverage of the area is not comprehensive, it does cover all landscape zones, while focusing on rivers, estuaries and lochs. John Slezer's camera obscura derived 'prospects' published as his *Theatrum Scotiae* (1693) includes interesting and relatively accurate views of Perth, Scone and Dunkeld (John Slezer's Engravings of Scotland). Soon after, the first Jacobite rebellion led to significant military mapping and provided very useful plans of Perth in about 1715–16 by Lewis Petit (Figure 3) and William Horneck. It was Major-General William Roy, as a military engineer, surveyor and antiquarian, who was uniquely qualified to contribute however. Through the use of new technology, he improved accuracy, while mapping comprehensively, in his Survey of Scotland 1747–55, and *Military Antiquities of the Romans in Britain,* published posthumously in 1793.

The later 18th century saw a flurry of work which provides invaluable early accounts of archaeological sites and traditions surrounding them. The Welsh naturalist and antiquary Thomas Pennant's journeys in Scotland (1771; 1776) provide historical overviews of sites encountered. In addition to scenic views of Dunkeld and Taymouth, and plans of Roman sites, his 1772 tour included visits to several ancient 'circular buildings' with his local guide the Rev. John Stuart of Killin. His extensive discussion of these was an early example of landscape archaeology, and a systematic approach to enquiry, with carefully chosen local guides, that foreshadowed the Old Statistical Accounts.

The period also saw two important projects, one focusing on Perth and the other at county level. The first detailed map of Perth, by Archibald Rutherford (1774), captured the burgh much as it survived at the end of The Middle Ages, just before a period of significant expansion. Likewise, James Stobie's map of *The Counties of Perth and Clackmannan* (1783) provides an important update to Roy's systematic mapping 30 years earlier. New discovery and intensive mapping went hand in hand, as in the first record of the Cleaven Dyke, as a Roman military work between two camps on McOmie's *Plan of the Roman Wall and Camp near Mickleour* (1784).

Equally significant, was the first, or Old Statistical Account (OSA), compiled by parish ministers between 1791 and 1799 and published by Sir John Sinclair of Ulbster. Irrespective of their accuracy, their accounts of 'Antiquities', often in notes embedded under 'Miscellaneous observations' or 'Curiosities and Antiquities', started the process of compiling lists of archaeological sites for an area. They are also important sources that capture local traditions relating to them.

The 19th century: Science and Societies

The 19th century saw a scientific resurgence with an emphasis on enquiry for enquiry's sake. The momentum of mapping established in the 18th century continued with notable revisions of Perth plans by Robert Reid (1809 and 1818) and John Wood (1823). In addition, early reports of new finds appeared, such as that by William

Jerdan of 'Armlets found near Drummond Castle…' in *Archaeologia* (1840), alongside the first detailed site histories, such as Cosmo Innes' *Liber ecclesiae de Scone* (1843). In 1824, the Perth Literary and Antiquarian Society collection was made more accessible with the opening of a Rotunda Museum for both the Society and Perth Library. Modelled, in reduced form on the Pantheon in Rome, it also served as the Marshall Monument, a memorial to the late Provost Thomas Hay Marshall (Taylor 1984).

Arguably the most significant mid-19th-century developments were the publication of the New Statistical Accounts of Scotland (1845) and the Ordnance Survey (OS) first edition county series (1847–84). The former brought a more scientific approach than the Old accounts, while the detail provided by covering the entire county at 6" to the mile resulted in the discovery of many new sites. This was effectively the first comprehensive list of sites in the area. The survival of the OS Namebook for the area is also of considerable value. Amid the thriving Victorian interest in science and nature at this time, the Perthshire Society of Natural Science (PSNS) was founded in 1867. It produced a journal, in a variety of formats, from 1870 to 1991, and continues to publish a journal on an infrequent basis.

The impact of this mid-19th-century scientific resurgence is perhaps best illustrated through the *Proceedings of the Society of Antiquaries of Scotland*. Published over the second half of the 19th century, they show an emphasis of research on prehistory and early medieval remains in the area. In terms of prehistory, they focus on visible monuments such as standing stones (Allen 1881), cup marked stones (Hutcheson 1884; MacMillan 1884; Gow 1895; Baxter 1897) and Bronze Age mounds (Boston 1884) or sites uncovered by agriculture, such as cemeteries (Anderson 1885) and cists and urns (Stewart 1884). The importance of the area's crannogs was also first identified (Stuart 1865; Begg 1888), while several forts were excavated (Wise 1856; Bell 1893 and Christison and Anderson 1899). The early medieval period was also well represented with papers on Pictish stones (Anderson 1877; Galloway 1877; Laing 1878), brooches (Anderson 1880), early bells (Anderson 1892; Forbes 1870), St Serfs on Loch Leven (Kerr 1881) and the coronation stone (Skene 1869). In addition, area studies were made of

Joseph Anderson © PKHT

Significant developments were also made in the management of sites, when following previous attempts to introduce heritage protection acts, The Ancient Monuments Protection Act of 1882 recognised the need for government protection of sites. While none of the 21, predominantly prehistoric, sites on the initial Scottish schedule were within Perth and Kinross, the process of legal protection of nationally important sites, through government authority, was underway (Mynors 2006, 7–9).

1900–50: RCAHMS and the origins of synthesis

The establishment of the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) in 1908 was without doubt the most important advancement in terms of recording sites. Created in response to the 1882 Act, and the wider-ranging Ancient Monuments Protection Act of 1900, it initially recorded pre-1707 buildings and monuments of note (later updated to 1805). These were published as a series of county inventories; however, the early examples included little, if any, survey in advance. Importantly for this framework, while Kinross was published with Fife and Clackmannanshire (RCAHMS 1933), Perthshire was never to see a full inventory in this style.

Research in the first half of the 20th century continued focus on prehistory, with several works of early regional synthesis. The first were F R Coles' papers on the stone circles of north-east and south-

east Perthshire (1908 and 1909), which he followed with Aberfeldy (1910) and Strathearn (1911). These were complemented by papers on standing stones (Calder 1951) and cup marked stones (Callander 1918; Dixon 1921a; Naismith 1927), including excellent work on the Strathtay examples (Dixon 1921b), and updated with discoveries by Mackey (1948). The importance of the region's crannogs was further explored by Blundell in his pivotal paper on the Highland examples (1913, 258–65), while two other key works tackled 'forts and camps' (Christison 1900), and the 'circular forts' of 'North Perthshire' (Watson 1913). The latter was then updated in light of excavations at Borenich (Watson 1915).

Other notable excavations included the chambered long cairn at Kindrochat (Childe 1930 and 1931), Blairdrummond Bronze Age cairn (Callander 1929), and short cists at Meikleour (Ritchie and Dow 1935) and Abernethy (Stevenson 1948). The early 20th century also saw a resurgence in interest in Roman remains which focused on the key sites of the area. These included Inchtuthil fortress (Abercromby 1902; Anderson 1902; Ross 1902), other forts and roads (Christison 1900; Callander 1919; Richmond and MacIntyre 1936 and 1939) and the watchtowers of the Gask system (Abercromby 1904; Richmond 1940). Medieval and later periods were again less well represented (Davidson 1950; MacDonald 1921).

In 1902, the town council of Perth ook over the care of the collections of the Perthshire Society for Natural Sciences, and in 1914 added to this the collections of the Perth Literary and Antiquarian Society and their Museum, which was dissolved. After many years of campaigning, the Rotunda was extended and the newly designated Perth Museum and Art Gallery was opened in 1935, giving the form seen today (Taylor 1984, 16). A new museum for Perth and Kinross is currently under development at the former Perth City Hall, set to open in 2024.

A year before the opening of Perth Museum and Art Gallery, a paper entitled 'A New Analysis of the Early Bronze Age Beaker Pottery of Scotland' was published by Margaret EC Mitchell (1934). Making a remarkable contribution, she would go on to have a leading role in archaeological research in the area until the 1980s, as Margaret EC Stewart (Figure 5). Pivotal to this was her influence in establishing the Archaeological and Historical Section special interest group of the Perthshire Society of Natural Science (PSNS) in 1948 and her role as its first President (Sherriff 2000, 26–7).

1950–75: Stewart, the PSNS and the local history societies

Stewart's 30-year span of activity with the PSNS gained momentum from around 1950 (Sherriff 2000, 29). However, she also led projects with local groups such as the Abertay Historical Society and the Breadalbane Historical Society. Highlights of her excavations include Clach na Tiompan chambered long cairn (Henshall and Stewart 1954), Dalnaglar (Stewart 1962), the Lundin standing stones (Stewart 1965), her work on the 'ring forts' of Highland Perthshire (Stewart 1969) and Moncrieffe stone circle (1985). She also contributed through a review of Strathtay in the 2nd millennium BC (Stewart 1959), and posthumously to a review of Bronze Age burial in Tayside (Stewart and Barclay 1997). Piggott's 1957 review of the Blair Drummond wheel, found in 1830, added greatly to our understanding of that remarkable find. 1965 saw both his excavations commence at Croft Moraig stone circle (Piggott and Simpson 1971) and the publication of the Pitnacree Neolithic round barrow (Coles and Simpson 1965).

The 1950s and 1960s also a renewed focus on Roman remains, commencing in 1952 with excavations at Inchtuthil Roman fortress, which would last 14 seasons (Pitts and Richmond 1985). This activity continued into the 1960s at the Roman forts at Carpow (Birley 1963; Wright 1964; Dore and Wilkes 1999), Ardoch (Breeze 1970) and new work at Fendoch from 1973–86 (Frere and Wilkes 1989). Much smaller in scale, but equally important, was the 1965 excavation of the watch/signal tower at Gask House by Anne Robertson, followed by work at other sites (1974).

While early medieval study continued to focus on carved stones (Calder 1951; Stevenson 1959; Henderson 1962), understanding of the period was enhanced considerably through excavation at Dundurn fort and Forteviot (Alcock et al 1989; Alcock and Alcock 1993). While the medieval period again remained rather understudied (Dagnall 1958; Stevenson and Henshall 1957; Laing 1971), medieval Perth was soon to be placed at the forefront of

archaeological research in the area due to the nascent development of the High Street. It is significant that this period also saw a healthy broadening of interests into the post-medieval period with papers on cruck framed buildings (Dunbar 1957), Caulfeild's military roads (Graham 1964) and iron bloomeries around Loch Rannoch (Aitken 1970).

1975–90: Rescue!

Before development management archaeology was introduced through National Planning Policy Guideline 5, there was no systematic check for the impact of new development on archaeological remains. As a result, local communities often resorted to protest in order to persuade developers to allow museum staff, university archaeologists and volunteers carry out 'rescue' work in advance of destruction. Again, Perth and Kinross was fortunate in having Margaret Stewart, who in 1974 formed the Perth Archaeological Survey in response to the threat of development to urban archaeology (Sherriff 2000, 35). Monitoring of development led to small-scale excavation in St Ann's Lane (Thoms 1983), and ultimately the Scottish Development Department (SDD) funded excavations led by Nick Bogdan at 75 High Street (now Marks and Spencer) between 1975–77. One of the largest urban medieval excavations carried out in Scotland, they remain unparalleled in terms of the depth, quality and quantity of deposits uncovered. Due to the waterlogged soils, a remarkable range of 29 timber buildings and rare organic small finds such as leather and textiles were recovered, and eventually published, in four fascicules between 2010–12.

Perth High Street excavations: preserved wattle wall and 'toilet seat' © HES

In 1977, the SDD's Ancient Monuments Directorate (which later became Historic Scotland) and the Society of Antiquaries of Scotland together founded the Urban Archaeology Unit. In 1982 this became The Scottish Urban Archaeological Trust (SUAT), based in Perth due to the amount of work being carried out in the burgh. SUAT's urban expertise was much tested over the 1980s and 1990s, often funded through the Manpower Services Commission and the SDD, the results of which have been collated (Bowler 2004). After this, their remit broadened to more fully embrace developer-funded projects and research projects.

Developer-led, and funded, archaeology began in the 1970s as the first local government archaeologists brought specialist advice to local planning authorities. The aim was to manage development and mitigate the impact of new construction, following widespread unrecorded destruction during the 1960s. English local authorities had comprehensively secured this advice by the early 1980s along with the Sites and Monuments Records (SMRs), the key information base that underpinned the advice (Baker 1999). Local government in Scotland took longer to react, however. Partly in response to the variability in local authority services, the Tayside and Fife Archaeological Committee (TAFAC) formed in 1977 as a liaison group to promote and protect archaeology in Perth and Kinross, Angus, Dundee and Fife.

Forestry was another major issue of this period. In the 1960s, Scotland's forest and woodland cover was around 6% and a drive for afforestation, initiated by the Forestry Commission, was followed in the 1970s and 1980s by private forestry schemes that saw tax liabilities diverted into woodland creation. A general lack of consultation and regulation saw large areas of the uplands ploughed and planted, and led to clashes with both nature conservation interests and the heritage sector. In response, the RCAHMS established the Afforestable Land Survey in 1989 to undertake strategic survey in areas where new planting was likely. The programme was the subject of consultation and agreement each year between the RCAHMS and Historic Scotland with the advice of the Forestry Commission. By the 1990s, the nascent commercial archaeological sector was beginning to provide walkover surveys in advance of planting, and local government archaeologists began to advise on

forest plans.

Several significant research excavations also began in the late 1970s, including at North Mains burial mound and henge (Barclay 1983), Dundurn fort (Alcock et al 1989). Oakbank crannog on Loch Tay (Dixon and Andrian forthcoming), revealed organic remains from the Iron Age which were on a par with those from Perth High Street. Professional excavation in advance of development became more common outside the burgh from the 1980s (Barclay 1983; Watkins 1981; Hingley et al 1997). In addition, pre-afforestation excavation of hut-circles at Carn Dubh, Moulin, from 1987, significantly revealed early medieval use (Rideout 1995). Other major excavations included the Bronze Age cairn at Sketewan, Strathtay (Mercer and Midgely 1997) and the kerb cairn at Beech Hill, Coupar Angus (Stevenson 1995).

Another major source of new discoveries over this period was through the establishment of a programme of annual aerial survey by RCAHMS in 1976, building on the pioneering work by J K St Joseph of Cambridge University. The initial focus of this work was primarily on discovery and recording of cropmark sites but soon expanded to record known archaeological sites, monuments and historic buildings. The discovery of considerable numbers of cropmark sites has significantly changed our understanding of many periods. While aerial survey enhanced the national record of historic buildings, beyond standing building surveys of listed buildings, post-medieval archaeological survey remained somewhat fringe. A notable exception was a study of 18th-century and later roads and bridges from Dunkeld to Inverness (Curtis 1979).

1.4 The last 30 years: Development Led and the Community

The 1990s: Research and development, TAFAC and Treasure Trove

The early 1990s saw three major archaeological developments in the area. Firstly, two key RCAHMS surveys were published, which together encompassed the area north of the Tay estuary and east of the River Tay (1990; 1994). Providing a consistent knowledge base for this area, they in part addressed the absence of a county inventory. They also introduced a knowledge bias, however, with the much larger area west of the River Tay covered only by ad hoc field and aerial survey. Secondly, survey and excavation of the Cleaven Dyke from 1993–97 importantly confirmed this well-preserved and exceptional monument as a Neolithic cursus and bank barrow (Barclay and Maxwell 1998). Clearance of the site, initiated by Historic Scotland soon after, has unfortunately not been maintained and this remarkable site is under a new threat of natural woodland regeneration. Finally, the Roman Gask Project was established in 1995 to study the Roman remains on and around the Gask Ridge. It developed into a major research programme of over 20 years and has added considerably to our understanding of this important aspect of the region's Iron Age (Woolliscroft 2002; Woolliscroft and Hoffmann 2006).

Local authority archaeology services and Sites and Monuments Records (SMRs) were more firmly placed within the local planning process with the publication of National Planning Policy Guideline (NPPG) 5: *Archaeology and Planning* (Scottish Office 1994a) and Planning Advice Note (PAN) 42: *Archaeology – the Planning Process and Scheduled Monuments Procedures* (Scottish Office 1994b). Some Scottish local authorities, including Perth & Kinross Council however, continued without appointing appropriately trained and resourced staff, relying on under-resourced Perth Museum staff to comment on planning applications, using 'pre-SMR' data (Baker 1999, 16; 101). Medieval Perth continued to be the focus of much of this work (Bowler et al 1996), including detailed discussions of street frontages (Moloney and Coleman 1997), burgage plots and backlands (Coleman 1997; Cox et al 1996), the harbour (Bowler and Cachart 1994) and the use and role of iron (Photos-Jones and Atkinson 1999).

The later 1990s also saw two other important developments in the area, however. The first was the establishment of the annual Tayside and Fife Archaeological Committee (TAFAC) journal from 1996, which has made a considerable contribution to the area by showcasing new discoveries in addition to their annual conference. Important early papers covered early medieval Meigle (Ritchie 1995; Barclay 2001); Bronze Age metalwork from Kinnoull (O'Connor and Cowie 1997); settlement in Strathbraan (Cowley 1997); Croft Moraig stone circle (Barclay 2000) and pit-defined cursus monuments

(Brophy 2000); the Crieff Burgh Cross (Hall et al 2000) and artefacts from medieval Perth (Hall and Owen 1998; Crone et al 2000). Secondly, the crannog reconstruction on Loch Tay was built between 1994 and 1997 as an experimental archaeology project, led by Nicholas Dixon and Barrie Andrian, based on their underwater research carried out through the Scottish Trust for Underwater Archaeology (STUA). The Scottish Crannog Centre, opened in 1997, is run by The Scottish Crannog Centre Trust. Initially operating as a successful visitor attraction and educational venue, in recent years it has shifted to become an accredited museum, achieving museum status in 2018. It continues to make a significant contribution to communicating life in the Iron Age to the public, within a wider remit of immersive education, investment in young people through training and apprenticeship schemes and extensive community engagement. The loss of the reconstruction through a fire in 2021, after a quarter of a century of use, was a tragedy. Fortunately, the Scottish Crannog Centre has received widespread support to develop their plans for a new, larger site, also on Loch Tay.

The significant growth in metal-detecting in Scotland over the last 30 years has been challenging, and Perth and Kinross has frequently been the focus of intense activity. Ancient Monuments legislation and local authority bye laws determine where this can, or rather cannot, take place. The principal legislation governing the activity is the Treasure Trove system, rooted in the Scottish common law regulations of Treasure Trove and *bona vacantia* ('ownerless goods'). Ultimately derived from medieval feudal law, the laws protect portable antiquities of all periods and ensure their preservation for the nation's benefit. The system works through the Treasure Trove Unit, which reports to the Scottish Archaeological Finds Allocation Panel, which in turn reports to the Queen's and Lord Treasurer's Remembrancer in the Crown Office. There is a legal requirement to report discoveries through a published process and guidelines. While the history and operation of the system has been regularly debated (Sheridan 1995; Hall 1996; Saville 2002 and 2009; Curtis 2007), Treasure Trove remains the key determinant in the local and national collecting of archaeological finds (from excavation as well as metal-detecting). The majority of material is now allocated at a local level to registered museums. The volumes of material have increased in the last decade, bringing into focus the financial burden imposed by rewards for finders and storage constraints faced by all museums. The system now allocates more material to local museums than it does to the National Museums Scotland and it is successfully made available for research and display.

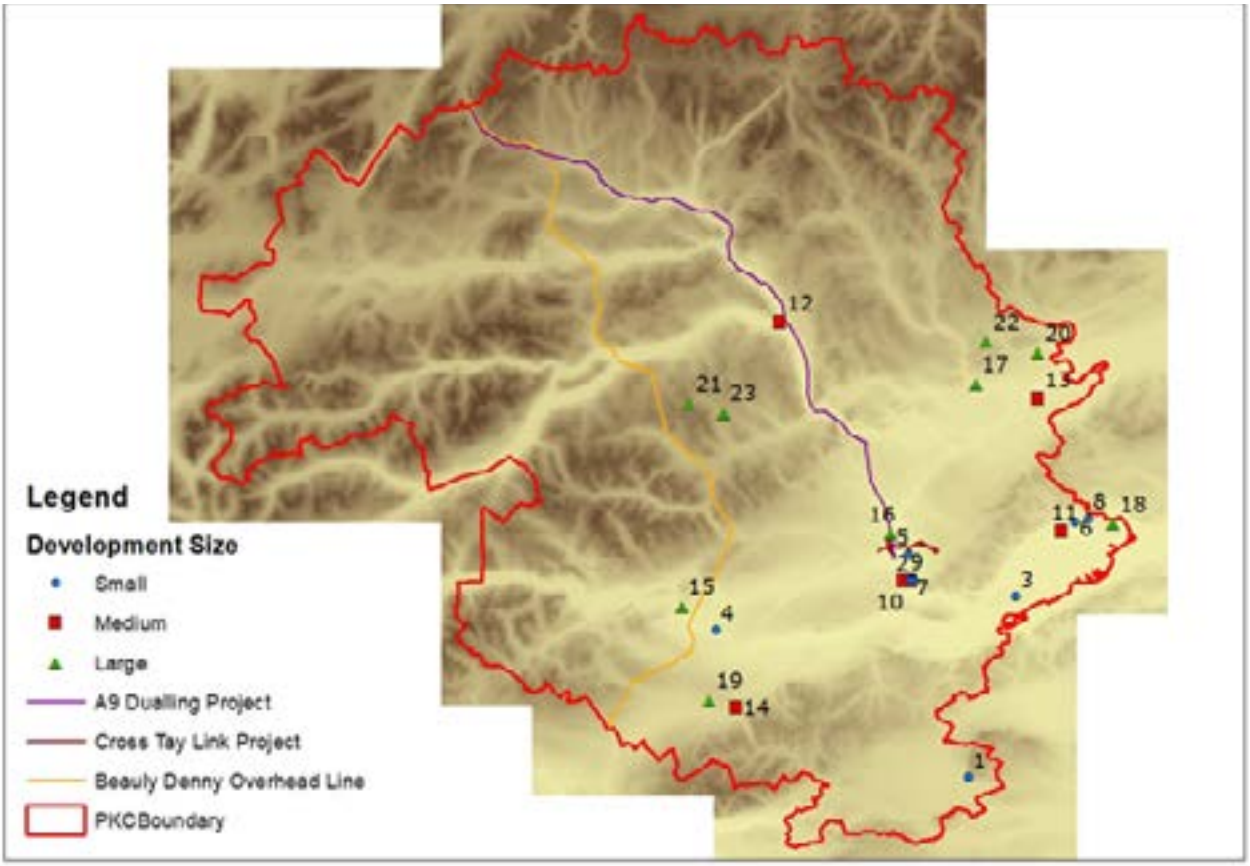
For Perth and Kinross, the principal repository remains Perth Museum & Art Gallery (operated by Culture Perth & Kinross on behalf of Perth & Kinross Council), a committed agent for the collection, research and display of archaeological finds, resources permitting. Perth Museum has made a significant contribution to research of finds and artefacts and their landscape context over the last 25 years (Hall 2001; 2005; 2007; 2011, 2015; 2020; 2021). Notable displays include The Carpow Bronze Age logboat (2012); A Loch of Bronze: New Finds from Kinrosshire's Bronze Age (2013, at Kinross Museum); Breadalbane Bling! (2015); Cradle of Scotland (2016) and Edge of Empire (2021). These are frequently an outcome of research programmes, and are often in collaboration with local, regional and national partners, with several notable publications as a result (Cowie et al 1996; Strachan 2010; Hall et al 2020; Campbell and Driscoll 2020 and Brophy and Noble 2020).

The 21st century: Development management, agri-environment and citizen science

In 2000, the issue of the lack of consistent, well-resourced archaeological planning advice for the local authority was finally resolved. Initially supported by Historic Scotland, a planning archaeology service was established by Perth and Kinross Council, delivered on their behalf by Perth and Kinross Heritage Trust (PKHT). Importantly, advice was based on a new, GIS-based Sites and Monuments Record (SMR), developed from the then National Monuments Record for Scotland (NMRS) and paper-based records held by Perth Museum. This new SMR was soon upgraded to a Historic Environment Record (HER) through enhancement projects, including an Urban Archaeological Database (UAD), county-wide polygonisation and the inclusion of historic building data. It remains the information base on which professional, objective advice is based regarding the need for archaeological mitigation in advance of new development.

Areas of archaeological sensitivity are mapped out in Local Development Plans (LDP) and all planning applications are assessed for potential archaeological impact. Archaeological mitigation now embraces a suite of techniques including field evaluation, monitoring, full excavation and historic building recording. PKHT is a member of the Association of Local Government Archaeological Officers (ALGAO), a network of curatorial development management archaeologists who work for, or on behalf of, local government and the National Parks whose task is to protect, manage and promote the historic environment. Collectively, ALGAO Scotland are key stakeholders in ensuring the HER and appropriate historic environment mitigation are fully represented both in current and future policy.

Alongside the LDP, this provides the backbone for information-based decision-making as part of the curatorial role for development management. Working with colleagues such as local authority planners, it ensures the best outcome for the archaeological resource in developments across Perth and Kinross and is vital to successful implementation of policy and guidance. In addition, and as a result of their key role in the planning process, development-led, commercial archaeology now provides the majority of evidence for past human activity across the UK, funding excavation, post-excavation analysis and publication to preserve remains by record where preservation *in situ* is not possible.



Selected development-led projects since 2010: (1) Kilmagadwood, Scotlandwell (2) George Street/Skinnergate, Perth (3) Mains of Murie Farm, Errol (4) Innerpeffray Library (5) Scone Palace (6) The Snabbs, Longforgan (7) Blackfriars Street, Perth (8) Market Knowe, Longforgan (9) Carmelite Friary of Tullilium, Perth (10) Perth Theatre (11) Moncur Road, Inchture, (12) Logierait (13) Bankhead of Kinloch, Meigle (14) Peterhead, Auchterarder (15) Broich Road, Crieff (16) Fieldview, Luncarty (17) Honeyberry Crescent, Blairgowrie (18) James Hutton Institute, Invergowrie (19) Blackford (20) Glenisla Golf Course, Alyth (21) Calliachar wind farm (22) Tullymurdoch wind farm (23) Griffin wind farm © PKHT

Since 2000, there has been the continual pressure of new housing developments, varying in scale from single house builds to medium to large-scale construction projects, with recent large-scale infrastructure projects. All have contributed significantly to our understanding of the archaeology of the area, with small-scale developments often contributing as much as larger ones. Selected small, medium and large-scale developments that have produced significant results since 2010 are shown in Figure 8. The introduction of wind farms to the area since that date have resulted in the first significant developer-funded work in the uplands. Likewise, large-scale linear infrastructure projects have also had a major impact, notably through the Beauly-Denny power line (Sneddon forthcoming), and the ongoing A9 dualling programme and Cross Tay Link. These offer invaluable opportunities to study change across large landscape zones, albeit through a relatively narrow linear window.

Development management archaeology at the James Hutton Institute, Invergowrie, in 2021
© PKHT, courtesy of The James Hutton Institute

The Countryside Stewardship Scheme, introduced in 1991, was the first in a series of agri-environment schemes (followed by the Rural Stewardship Scheme and then Scottish Rural Development Programme), to provide government subsidies for enhanced agriculture, including management of the historic environment. In Scotland, archaeological audits were required as part of the application process, and while they at least provided historic environment information to land managers, enhanced management of archaeological sites as a result was disappointing overall.

Forestry and Land Scotland, the Scottish Government agency charged with managing Scotland's national forests and land (previously Forest Enterprise Scotland, an agency of Forestry Commission Scotland), appointed an archaeologist in 2008. This has seen the work of ensuring archaeological walkover surveys in advance of afforestation expanded to include a focus on archaeological measured survey of significant sites, and conservation management and research excavation, as at the four poster stone circle of Na Clachan Aoraidh (Ellis and Ritchie 2018); and outdoor archaeological learning, publishing a range of learning resources (Barnett et al 2021). Scottish Forestry, the Scottish Government agency charged with regulation of the forestry sector to meet the UK Forestry Standard which includes robust historic environment guidelines, has also published a range of supporting guidance notes. These include the Historic Environment Resource Guide for Forest and Woodland Managers in Scotland (Forestry Commission Scotland 2017).

A number of research projects were also carried out which, to some degree, engaged the local community with the aim of developing skills and promoting understanding of the historic environment. From 2001–6, the Ben Lawers Historic Landscape Project significantly enhanced understanding of activity north of Loch Tay over millennia. It was important due to its scale, multi-disciplinary nature (Atkinson 2016) and the inclusion of volunteers and students. While much smaller, Perth and Kinross Heritage Trust's Black Spout project, carried out between 2005–9 (Strachan 2013), was an early community archaeology project of the type that became increasingly common from around 2010. This focused on community and student engagement to contribute to a neglected research narrative, while developing skills and bringing social cohesion. The Trust also carried out a 'rescue' excavation to recover the Bronze Age Carpow logboat in 2006. The nature of the project precluded volunteer involvement, but the study of a single artefact resulted in a wider landscape study (Strachan 2010). Another major landscape study, the Strathearn Environs and Royal Forteviot (SERF) project, was carried out between 2006–16 as the field school of the Universities of Glasgow and Aberdeen. It also engaged local

volunteers in exploring the archaeology of Forteviot, Dunning and Forgandenny (Noble et al 2017; Brophy and Noble 2020; Campbell and Driscoll 2020).

While the 'professionalisation' of archaeology through the planning process has brought the benefits of a consistent approach and significant resources, it has also commonly excluded local communities. However, the last decade or so has seen the emergence of community archaeology more fully, in part as a result of funding opportunities through the National Lottery Heritage Fund (previously the Heritage Lottery Fund). Given Margaret Stewart's previous engagement of local groups in fieldwork, this might better be described as a resurgence, and it is apt that Perth and Kinross has often been at the forefront.

PKHT led the annual celebration that began in 2003 as Perthshire Archaeology Week, developed with the Perthshire Tourist Board, and delivered with a range of partners including the Scottish Crannog Centre, Perth Museum and several local history and archaeology societies. PKHT has also led a series of community heritage projects: Bridging Perthshire's Past (2008–11): the Loch Tay logboat reconstruction (2009); Historic Churchyards project (2011–13) and the Tay Landscape Partnership (2014–18), a £2.6 million initiative which included a suite of archaeology and historic building projects (Ballin and Nicol 2017; Strachan et al forthcoming). Programmes of community archaeology were also delivered by Dr Oliver O'Grady at Fortingall (2010–11) and in Kinross, both on St Serf's Island on Loch Leven (O'Grady 2017) and through the Living Lomonds Landscape Partnership (2013–16), and Our Portmoak (2017) projects. Kinross also saw the crossover of a development-led excavation leading to community-led research at Kilmagadwood Early Bronze Age cemetery (Sheridan et al 2018). Building on earlier work, PKHT's 'citizen science' model has also investigated early medieval settlement through the Glenshee Archaeology Project (2012–18) which was designed to follow on from publication of the Pitcarmick-type buildings. More recently, excavations at the King's Seat Archaeology Project (2016–20), have confirmed a royal fort at Dunkeld (Strachan et al 2019 and Strachan and MacIver forthcoming).

Community-led archaeological research at King's Seat, Dunkeld in 2019 © PKHT

Other important recent research, not mentioned above, has included the re-excavation of Croft Moraig stone circle (Bradley 2016) following work by Piggott and Simpson (1971); the discovery of a Middle Bronze Age dirk from the River Tay at Perth (Cowie et al 2011); 18th-century military roads and bridges (Farquharson 2012) and the archaeology of the Scottish Command Line, a series of anti-tank 'stop-lines' from 1940 (Barclay 2011). The potential of applying new techniques to exiting artefacts, and for future excavations, has been highlighted by papers on medieval ceramics from Perth (Hughes and Hall 2019) and for multi-isotope analysis of skeletal remains (Czére et al 2021). New technology also continues to promise significant scope for new discovery. For example, the development of Airborne Laser Scanning, or LiDAR, has the potential to revolutionise how we understand upland archaeology in the way the recovery of cropmark information did over the 1960s–70s.

In conclusion, Perth and Kinross has a rich and vibrant history of archaeological research, a strong and active research profile. It has a future full of potential with research conducted by a range of commercial, community-based and academic organisations. The results of this research are not only valuable for understanding past human activity in this area, but importantly also contribute to the national narrative. It is therefore critical that ongoing and future research is formulated to fit with both national and regional priorities, and in that respect this framework will have a key role.

1.5 Aims and Methodology of PKARF

The key priorities were to:

- publish concise and accessible summaries of current knowledge;
- produce clearly defined research priorities and questions to underpin future work.

It is envisaged that the resource will primarily assist the commercial/planning archaeology sector, community-based groups developing new projects and university students in identifying dissertation topics.

A Steering Group was established to guide the framework's development with professional, academic and community expertise. Individual members are listed in the Acknowledgements (below). They represented a wide range of local and national stakeholders, in addition to the funder and delivery organisation, including the local 'curatorial' archaeologists and The Association of Local Government Archaeological Officers (ALGAO Scotland); commercial archaeology practices and the Federation of Archaeological Managers and Employers (FAME); the museums sector; university researchers and the Living On Water Project; community archaeology volunteer interests; the Perthshire Society of Natural Science (PSNS); the Tayside and Fife Archaeological Committee (TAFAC); Historic Environment Scotland's National Record of the Historic Environment (NRHE); and the Scottish Archaeological Research Framework (ScARF).

The framework was realised through a three-phase work plan of assessment, review and production and began with an assessment of current knowledge through a review of existing literature and data sources, and contact with active researchers and specialists. A chronological chapter structure was adopted to maintain alignment with ScARF and a lead contributor appointed for seven time periods. Their role was to provide a brief overview and propose research priorities and questions for their period of expertise, and these were presented at a conference in August 2019, where a wide range of stakeholders then contributed through workshops. Following the conference, comments and recommendations were integrated into the outline chapters and additional specialists were commissioned to contribute. Draft chapters were then peer-reviewed and offered for public consultation before being finalised.

An Environmental and Archaeological Science panel, consisting of 12 members, was formed in December 2019 following the recommendations from the 2019 conference. The panel members developed a chapter on environmental and archaeological science to complement the period chapters. Again, individual members are listed in the Acknowledgements.

Policy Context

The PKARF addresses nationally strategic priorities for the historic environment Our Place in Time and Scotland's Archaeology Strategy and the framework's objectives correspond with the following aims, addressing aspects of Aims 1-4 of the Strategy, delivering specifically on Objective 2.1:

Our Place in Time (OPIT)
Aim 1: Understanding
Aim 2 Protecting
Aim 3: Valuing

Scotland's Archaeology Strategy (SAS)
Aim 1: Delivering Archaeology
Aim 2: Enhancing Understanding
Aim 3: Caring and Protecting
Aim 4: Encouraging Greater Engagement

The objectives of PKARF are detailed in the table below with the national strategical aims that each is aligned to listed in the adjoining columns.

PKARF Objectives	OPIT Aim	SAS Aim
Create a research strategy that encourages the improvement of how archaeological projects in Perth and Kinross are structured and delivered.	1	1
Review the current state of our knowledge and understanding of the archaeology of Perth and Kinross and create concise and accessible chronological summaries.	1	2
Produce clearly defined and accessible research objectives and priorities that can be used to underpin future archaeological research.	1	2
Create research priorities as a resource for the commercial/ planning archaeology sector, providing weight to the mitigation process ahead of development and so helping to safeguard the historic environment. It will also enable the work to be better aligned with regional and national research priorities, contributing more holistically to our broader understanding of Scotland's past.	2	3
Involve a diverse range of stakeholders in the framework, raising awareness of the historic environment and offering opportunities for all to engage, and develop a sense of value and ownership over its future.	4	4

1.6 Structure of PKARF

Document Structure

The period chapters presented are broadly in a similar format, with an Introduction; Regional Overview, which summarises the history of research and current knowledge base; and the Research Agenda with set thematic priorities followed by research questions to address knowledge gaps.

A challenge was presented by the considerable quantity of data available for the medieval period and later, and the availability of other sources, such as historic texts, maps and photographs. In order to accommodate this, there is some variation in the layout of the Regional Overviews, Research Priorities and Questions, and in the emphasis placed on monuments and material culture.

For prehistory, monument/find types are reviewed within The Extant Resource and research priorities and questions are combined together in a Research Agenda section towards the end of the chapter.

The later chapters are structured slightly differently but use consistent headings across the historic periods for easy navigation. The relevant research priorities and questions are found at the bottom of each of the individual sections.

Chronological terms

The chronological chapters within have been developed in line with the Scotland's Archaeological Periods and Ages (ScAPA) project as defined by the ScAPA thesaurus.

- Late Upper Palaeolithic and Mesolithic (12,700–4000 BC)
- Neolithic (4000–2450 BC)
- Chalcolithic and Bronze Age (2450–800 BC)
- Iron Age (800 BC–AD 350)
- Early Medieval (AD 350–1058)
- Medieval (AD 1058–1600)
- Post Medieval (AD 1600–1900) and 20th century

While historians more commonly refer to 'early modern' and 'modern' periods, as outlined in its introduction, for a variety of reasons the post medieval and 20th century chapter focuses largely on pre-1945 archaeology.

Monument types

The Scottish Monument Type Thesaurus has been used throughout to describe monument types. The first time individual sites are mentioned one each page they are identified by their HER number ID (eg MPK1234) and also site names are directly hyper-linked to the national Canmore record.

Geographical terms

Sites within Perth and Kinross are identified by a locating place-name only, while those beyond are also given their modern local authority area. Occasionally the historic term 'Perthshire' is used. The use of 'the area' or 'the region' refers to the modern administrative area of Perth and Kinross, however.

Radiocarbon dates

All radiocarbon (^{14}C) dates mentioned in the text are calibrated (cal) unless otherwise stated.

1.7 Acknowledgements

The collaborative nature of the framework was critical to its production and foremost the project team gratefully acknowledge the input of the 55 authors and contributors as listed at the start of each chapter.

The steering group was chaired by Michael Ballantine (PKHT) and over the duration of the project included David Bowler (Alder Archaeology); Ciara Clarke (AOC Archaeology Group); Mark Hall (Perth Museum and Art Gallery); Andy Heald (AOC Archaeology Group); Clare Henderson (PKHT); Gavin Lindsay (PKHT); Peter McKeague (Historic Environment Scotland); Sophie Nicol (PKHT); Helen Spencer (Society of Antiquaries of Scotland); David Strachan (PKHT); Michael Stratigos (University of Glasgow and then University of York); and Steven Timoney (Perth College of the University of the Highlands and Islands).

Presentations at the 2019 conference were given by Derek Alexander; Gordon Barclay; David Bowler; Kenny Brophy; Stephen Driscoll; Matt Knight; Michael Stratigos; Andrew Tibbs; Mark Watson and Dene Wright.

The Environmental and Archaeological Science panel was chaired by Ciara Clarke (palaeo-environment) and included Kate Britton (isotopic analysis); Lisa Brown (radiocarbon dating); Mike Cressey (charcoal); Anne Crone (dendrochronology); Orsolya Czére (isotopic analysis); Althea Davies (palaeo-environment); Derek Hall (human remains); Derek Hamilton (radiocarbon dating); Mhairi Hastie (archaeobotany); Coralie Mills (dendrochronology); Vanessa Reid (geoarchaeology); Lynne Roy (landscape geoarchaeology); Catherine Smith (zooarchaeology); and Scott Timpany (palaeo-environment).

The creation of PKARF was led and managed throughout by Perth and Kinross Heritage Trust. Gavin Lindsay was the project officer for the majority of the project, with Beth Rhodes and Leanne Demay joining the project for the latter stages. Copy-editing of the final text was carried out by Sarah Thomas.

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