



PAST

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Exploring the Archaeology of War & Warfare

PAS Summer Field Trip 2018

Over the years, the Society's summer field trip has offered opportunities to visit a wide variety of sites of all ages, from Pictish sculptured stones in Angus to prehistoric rock art in Northumberland. This year, our destination was the Slitrig Valley to the south of Hawick...

The bright and sunny morning of Sunday 1st July saw a minibus-full of PAS members and guests head off to explore a selection of sites ranging from the once bustling 20th century military camp at Stobs to the still impressive ramparts left by the anonymous builders of the 1st millennium BC fort on Newton Hill.

The broad theme of the day was the archaeology of war and warfare, and our first stop was Hawick **motte**, a well-preserved and imposing artificial mound constructed in the 12th century AD and once topped by a timber tower. Our guide here was Medieval specialist Dr Piers Dixon of Historic Environment Scotland. After setting the site in its archaeological and historical context, Piers led the party to the summit of the mound with its commanding views of the town and surrounding countryside.

In more modern times, the site has played a prominent part in the annual Common Riding celebrations, when the Cornet climbs to the top to sing the town song, which incorporates Hawick's slogan or war-cry "Teribus ye teri odin". Thankfully, perhaps, the one Hawick-born member of our party resisted the temptation to give us a rendition!



Hawick Motte (Source: T Cowie)

After a break for an excellent cup of coffee at Hawick's West End Café, we set off for our next port-of-call - the extensive remains of **Stobs Military Camp**. At various times, from the early 20th century onwards, Stobs was used for army training, as an internment camp and to house prisoners of war. Today, it is a site of major archaeological and historical importance owing to the quality of the surviving remains. Here, our guide was Andrew Jepson, who is masterminding a multi-stranded project for Archaeology Scotland, with the aim of promoting understanding and greater awareness of the site. Over the course of our visit, very Andrew skilfully combined the surviving remains with historical records and old photographs to bring the now silent camp vividly back to life.

From Stobs, we headed over the watershed into Liddesdale to visit **Hermitage Castle**. After a picnic lunch in the welcome shade by the picturesque ruins of the chapel, Piers Dixon introduced us to the exceptionally rich medieval archaeology of Hermitage Castle and its environs - describing for us in turn the significance of the chapel and the adjacent moated site.

Then, after pausing to view the extensive enclosed park and possible deer-trap to their north, Piers guided us around the remains of what appears to have been an earthwork castle which was largely cleared by the 14th century to make way for the highly atmospheric but very heavily reconstructed stone castle which dominates the site today.

From Hermitage we made our way back to Stobs, but much further back in time, to view the prehistoric sites of **Newton Hill fort** and nearby **White Knowe settlement**. There, hill fort specialist Strat Halliday urged us to consider the significance and very different character of these two sites, as we basked in the glorious late afternoon sunshine and enjoyed the splendid views of the Border landscape.

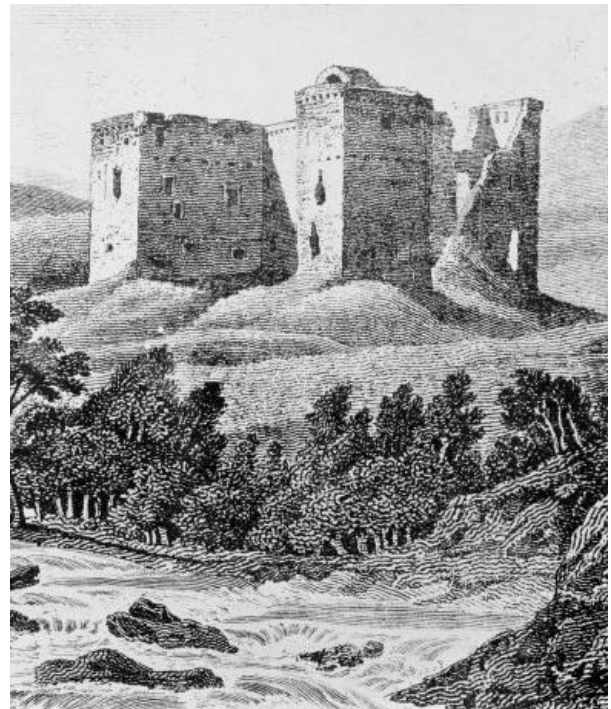
A brief stop for ice cream rounded off a grand day out – fittingly for a day which had started with a reference to the Hawick Cornet you could almost say we finished off with a cornet in Hawick!



Viewing the site of the First World War POW camp with Andrew Jepson, Archaeology Scotland's Stobs Camp Project Officer (Source: T Cowie)



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1. Piers describing the ruins of the medieval chapel at Hermitage (Source: T Cowie)

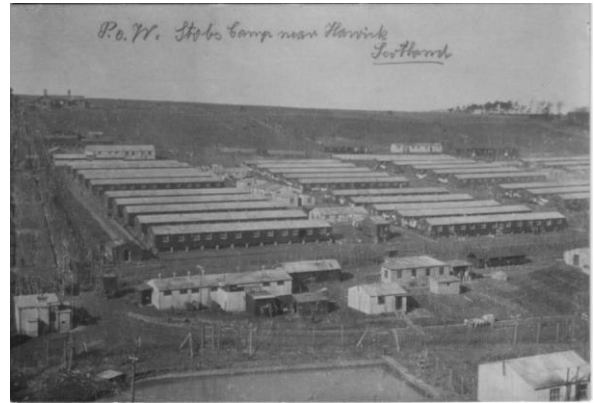
2. Hermitage Castle from an etching c 1800 (Source: HES/Canmore)

3. Visiting the prehistoric settlement at White Knowe (Source: T Cowie)

Stobs Camp Heritage Trail

Since our visit in July, Andy Jepson has been in touch to let us know that the Stobs Camp Project has launched **a new heritage trail** that guides visitors around the camp and lets them explore what Stobs was like during the First World War.

There are two options for accessing the free, self-guided heritage trail. It can either be downloaded as an App to your mobile phone or tablet or you can access it on your computer via the internet.



Stobs: photograph showing the First World War POW Camp (© Stobs Camp Project)

Further information and full instructions for accessing the trail are available on the website here <http://www.stobscamp.org/stobs-camp-heritage-trail/>



Developed in partnership with CMC Associates and created with Stobs Camp Project volunteers the heritage trail visits some of the key areas of the camp including a barrack hut, a drying shed and the former cemetery. The visitor can view some remarkable First World War images and listen to what it was like growing up at Stobs during the Second World War.



Autumn Lecture reports

In September, as our first speaker of the Autumn series, we were pleased to welcome Dr Gemma Cruickshanks of National Museums Scotland who gave an excellent presentation on the topic of *Iron Age Iron: Iron production and use in Iron Age Scotland*.

As the Post-Excavation officer within the Scottish History & Archaeology Department at NMS Gemma possesses expertise across a range of artefact types, but her own particular specialist interest is in iron working, and her talk was a distillation of aspects of her recently completed PhD.

Surprisingly little is known of how the craft emerged in Scotland. Iron objects are hard to date unless found in context, and as an artefact type have tended to be neglected. However the skills and knowledge needed to produce and work iron are considerable and the implements manufactured have had a profound impact on society – one of the key lines of enquiry in her research.

Gemma concentrated on four areas of Scotland - Skye, Orkney, East Lothian and Moray – essentially regions that have produced the most archaeological evidence so far rather than necessarily a reflection of their ancient significance). The timespan of her study encompassed the 'long' or 'Atlantic' Iron Age, from the introduction of ironworking around 800BC to the arrival of the Vikings around 800AD.

Although there are native ores like haematite, almost all ancient iron in Scotland is produced from 'bog iron'. These are iron rich deposits found where acidic water has leached iron bearing minerals out of ground water. An important consideration is that these deposits were renewable, accumulating again in perhaps 30 to 100 years. When bog iron is smelted using wood charcoal, a spongy mass of iron called 'bloom' is left (the temperatures achieved were not high enough to melt the iron). This mass can then be heated and hammered into shape as required. Despite the constraints of the raw materials, carbon impurities resulted in some surprisingly good steel being produced on occasion.

Moray is particularly rich in evidence, and the site of Clarkly Hill, near Burghead has recently produced significant evidence of ironworking. Preservation of both raw and roasted bog iron is good, giving some insights into the astonishing scale of the industry – certainly enough to supply Moray and probably beyond. Estimates of total production here suggested at least 75kg or finished iron, which would come from about 1200kg of bog ore, and use about 5000kg of wood charcoal. This was a large enterprise, needing considerable support manpower as well as the specialist expertise required for ironworking.

A variety of furnace types have been identified in Europe, but in Scotland they are mostly of shaft form, with a horseshoe shape about 50cm in diameter. Slag would be raked out of the open end. Gemma has taken a critical look at remains identified as 'furnaces' and considers only about 32 can be securely identified as Iron Age. However hearths for heating bloom are more widespread. It is also worth noting the Moray sites show evidence of other high temperature work, in bronze, ceramics and even glass – hinting at an array of specialist crafts.



One of a number of iron-smelting furnaces discovered during excavations at Culduthel, Inverness (Source: G Cruickshanks)

Iron implements are not restricted to weapons, with a variety of tools and also ornaments being found. The latter, in the form of pins and brooches, are mainly from East Lothian, and show highly skilled work, though no trace of iron production has yet been found in that area. At High Pasture Cave on Skye, another recently excavated site, a large number of iron artefacts have been discovered and these were probably ritually deposited as about half are still complete and functional.

One remarkable find at High Pasture Cave comprised the remains of an exceptionally fine iron wire chain, with links just 5mm long and 1mm in diameter, which currently lacks any European parallels.

Some dating of artefacts is considered possible, such as the axe heads shaped like socketed bronze axes: these are considered to date from the Early Iron Age – but generally the artefacts are too undiagnostic to permit close dating.

Another problem is that smelting remains seem to disappear after the second century AD: however this may be a reflection of the organization of ironworking. During the medieval period, iron smelting took place well away from settlements, and it is suggested this pattern of working may have been adopted in the Iron Age – perhaps because of pollution, or choosing to work near fuel sources.

Iron Age archaeology has concentrated on settlements, so more remote industrial sites may yet await identification and investigation.

In an effort to widen our understanding, Gemma also undertook the analysis of other types of material which can betray evidence of the use of evidence of iron tools – so called proxy evidence – in the form of e.g. whetstones used for sharpening iron blades, or bone, antler and wood with evidence of cut marks. In this way, it was possible, for example, to infer an increasing use of saw-type blades over time, even though very few such tools have survived.

Gemma closed by expressing the hope that her work would lay the foundations for further work - particularly by providing much clearer understanding of the types of evidence which excavators need to look out for in the course of their fieldwork.



High class iron artefacts – including a sword, spearhead, brooch and pin from a rich Iron Age warrior grave discovered at Dunbar, E Lothian (Source: G Cruickshanks).

In October, our guest lecturer was Jamie Humble of AOC Archaeology, who spoke on *Shedding light on Dun Deardail, Lochaber: Investigating a vitrified hillfort in Highland Scotland*.

Jamie Humble is a Project Officer in the survey department of AOC Archaeology and with his colleague Martin Cook, was co-director of the excavations at Dun Deardail [Martin was originally our advertised speaker but had to withdraw owing to work commitments. Ed].

An experienced field archaeologist, Jamie has also been involved in the excavation of several other Scottish hillforts, extensive 3D laser scanning surveys and the digitisation of artefacts within the HES collection.

To set the scene for his talk, Jamie introduced us to hillforts in general – illustrating the variations in their form, size and construction technique. With hillforts being built and used from the early Iron Age through to the early Medieval periods, and relatively little in the way of modern excavation, many aspects of these monuments are not yet well understood.



View of Dun Deardail (Source AOC)

Dun Deardail, in a prominent position beneath Ben Nevis, is one of about 90 hillforts in Scotland which exhibiting vitrification – a process that has intrigued antiquarians and archaeologists for over two centuries. One of the goals of the project was therefore to obtain better understanding of this phenomenon. Jamie explained how the process of vitrification occurs when a timber-framed drystone rampart is destroyed by fire. With temperatures reaching over 1000° C, the heat from the blaze begins to melt the rubble core of the rampart. As the burning rampart collapses, the rocks first fracture and then become liquid. When the fire burns out and the rampart finally cools, the burnt and molten rocks form large blocks of conglomerated stone.

While the presence of large quantities of wood (eg timber-lacing of the walls and wooden structures such as gateways and breastworks associated with the ramparts) is a pre-condition of vitrification, explanations purely in terms of accidental burning or firing by an enemy following an attack are having to be reassessed. Experimental reproductions of the process have largely failed, and it is now considered possible the burning was done as a deliberate act of destruction (perhaps over a period of several days with additional fuel if necessary) maybe as a display or symbol of power and with the

intention of creating a permanent memorial. It was noted that some crannogs and duns have also been vitrified, perhaps with the same aim of commemoration. With this in mind, Jamie drew our attention to *The Sorrow of Derdriu* - a famous Celtic myth which linking dramatic events in Iron Age Ulster to an unnamed Scottish hillfort. The project drew on this myth as a way of providing a glimpse into Iron Age world of warrior elites, bards and kings, complementing the more sober and forensic work of excavation and laboratory analysis.

The excavation investigated the possible entrance to the fort, the techniques of rampart construction (and its destruction) and the nature of occupation within the terraced interior. A series of trenches told a story of the construction, early occupation, vitrification and collapse, to be followed in time by levelling of the ramparts and periods of reoccupation. The walls were up to 5 metres thick, interlaced with timber and of quite complex drystone construction (different types of stone being selected and used to achieve strength and stability). Iron Age activity appears to have begun at the site in the 5th century BC while the burning event that led to the vitrification is estimated to have taken place roughly between 335 and 120 BC. However, by dating charcoal flecks presumed to have been expelled by the firing of the fort and trapped in a nearby peat bog, it was possible to refine the date of the vitrification event at this site to around 310BC.



Dun Deardail: rampart excavation in progress (Source AOC)

Jamie closed his talk about this spectacular and fascinating site by referring briefly to the finds, which ranged from evidence of metal working to significant amounts of carbonised cereals suggestive of organised grain storage.

For much more information see the excellent booklet on *The Archaeology of Dun Deardail* freely downloadable from the website of Forestry Commission Scotland:

<https://scotland.forestry.gov.uk/managing/work-on-scotlands-national-forest-estate/conservation/archaeology/learning/dun-deardail>

In November, we were pleased to welcome Dr Andrew Bicket of Wessex Archaeology to talk on the topic of Maritime Archaeology in Scotland

Operating from a UK wide network of regional offices Wessex Archaeology (WA) is one of the UK's major providers of archaeological and heritage services - above ground, below ground and underwater. As a Senior Project Manager within WA's Coastal & Marine Division based in Edinburgh, Andrew's main role is to coordinate and deliver the wide range of archaeological and cultural heritage services which they provide within the marine sector. Andrew set the scene for his talk by introducing us to some of these, explaining how preparations for offshore wind farms are currently a major source of work, but also aggregate dredging, wave and tidal energy projects, cable and pipeline-laying and port and harbour work.

Andrew started by summarising the kind of systems available for providing seabed data, their strengths and limitations and by giving examples of the types of feature that can be found: between them, side-scan sonar, magnetometer data and multi-beam echo-sounding enable shipwrecks and even occasionally submerged aircraft to be located. These have to be distinguished from fishing and other ship waste or even, in some areas, dumped industrial waste (as in the case of coal industry waste off the Northumberland coast). The company then prepares mitigation recommendations relevant to the particular development; this may involve preservation *in situ* (the normal option), the creation of an archaeology exclusion zone or more rarely, further investigation (a process which can very expensive underwater). Wessex Archaeology provides expert survey and dive teams, specialist advice and reports to its many clients, ranging from industry to government departments.

Andrew then went on to introduce us to examples of the wide ranging nature of the coastal and maritime heritage around the Scottish coastline; for example, multiple changes in sea level over time have left many ancient settlements, fish traps and shore works submerged or only accessible at very low tide.

One example of a site in which Wessex Archaeology was involved is the wreck of a Dutch East Indiaman, lost just offshore near Drumbeg on the Sutherland coast. There, the visible remains were surveyed in detail, and what was then a novel use of photogrammetry

underwater was deployed permitting the creation of a 3D model of the site and a survey record of unprecedented accuracy.



Upper image: surveying the site of a wreck discovered near Drumbeg in Sutherland and thought to date from the late 17th or early 18th century. Lower image: 'screengrab' showing detail of the cannon, part of a 3D photogrammetric model of the wreck site.

By means of graphs showing when identified wrecks were built and lost (peaking during wartime) Andrew gave an overview of the rich record around our shores, while emphasising the lack of early vessels. Around the Scottish coasts, the chances of survival of early craft are reduced by the high tidal range and rough seas and rugged coastline.

Indeed apart from occasional fragments, there is little surviving evidence before the introduction of metal craft about AD 1800; even among our surviving logboats from Scotland (mostly from lochs or rivers) only one of two have definitely been dated to earlier prehistoric times. Sculpture (for example the famous galley on the tomb at Rodel in Harris) and occasional literary references help to flesh out our understanding of maritime Scotland in the past – and particularly around the seaways and lochs of the West coast.

Wessex Archaeology is strongly committed to public outreach, and a three year research project (the Scottish Atlantic Maritime Past: Heritage, Investigation, Research and Education or SAMPHIRE Project) ranged over much of the West Coast, working with local communities to collect and enhance local knowledge of wrecks, resulting in the identification and systematic survey of over 100 previously unrecorded examples.

A more recent follow-up project (Coastal Archaeological Landscapes: Intertidal and Estuarine or COALIE) has located settlements, harbours and jetties in the intertidal area of the Ayrshire coast. In particular, Andrew drew our attention to the discovery of a series of massive oak piles which have been tree-ring dated to 1217AD and may derive from a medieval timber coastal fort. Details of both projects are available on-line.

Andrew's own research specialism is in early prehistoric palaeogeography and submerged palaeo-landscapes, and he closed an excellent presentation by introducing us to some of the fascinating work done on the evolution of the palaeo-landscapes of the southern North Sea and the English Channel, much of it based on work done for the aggregate industry. In particular, Andrew drew our attention to 'Doggerland' (named after the Dogger Bank), the landmass that once connected Britain to mainland Europe. This ancient geography is directly relevant to the prehistory of our own region - until it was eventually drowned by the sea following the last Ice Age, this was the landmass that enabled our very own Late Palaeolithic hunters (as represented by the distinctive finds of flint tools at Howburn near Biggar) to reach Scotland from NW Europe!

Jeff Carter

Shootinglee – a bird's eye view



This splendid drone aerial photograph shows the excavated remains of the peel house or fortified farmstead at Shootinglee. Located in what was formerly the Ettrick Forest, the site is currently being investigated under the direction of Joyce Durham & Piers Dixon (Photo: Stephen Scott)

Look out for more on Shootinglee in the next issue of PAST...

And finally, a reminder that our PAS website is at
<http://www.peeblesarchsoc.org.uk/>