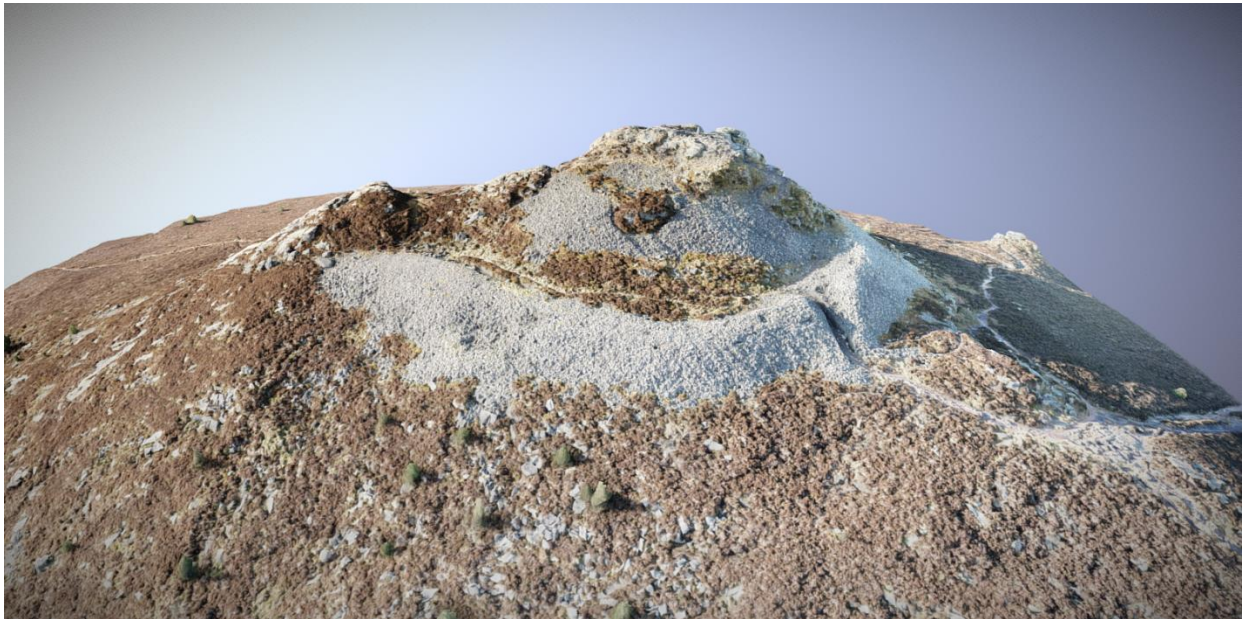


Mither Tap: Understanding a major fort of Pictland

Authors- Gordon Noble and James O'Driscoll, Department of Archaeology, University of Aberdeen



INTRODUCTION

Project Background and Previous Work

The University of Aberdeen, Department of Archaeology's Northern Picts project at the University of Aberdeen have been investigating Pictish sites in Northern Scotland since 2012. The research project is focused on the archaeology of Fortriu and Ce, a study area from Easter Ross to Aberdeenshire. As part of the project a series of fortified sites from Moray to Angus have been evaluated to establish chronology and to assess the potential for building a regional chronology and typology of fort types. This work has included large excavations of major Pictish fortified sites such as Rhynie and Burghead, along with smaller-scale evaluation of a range of other sites. To date the project has established an outline chronology for smaller ringforts, palisaded enclosures such as Rhynie and promontory forts such as Dunnicaer. One lacuna in the regional dataset is the chronology of the nuclear forts. Nuclear hillforts were first classified by Stevenson in 1949 who highlighted the presence of a hierarchical layout of a small number of forts in Scotland (Stevenson 1949). In terms of numbers, only a handful of nuclear forts have been radiocarbon dated, but more have been proposed through their morphology (Feacham 1955; Ralston 2004). The most extensively investigated in Pictland are Dundurn in Perthshire and Clatchard Craig, Fife (Close-Brooks 1986; Alcock *et al.* 1989), but even here the dating is poor, with only a handful of radiocarbon dates for each and with large error ranges. In Northeast Scotland the only dated site is Mither Tap, Aberdeenshire, where small-scale excavations conducted as part of path improvement by Forestry Commission Scotland and subsequently by the Northern Picts project in 2019, have confirmed occupation in the 1st millennium AD, at a hillfort long suspected to be a Pictish stronghold given its morphological form (Atkinson 2006; See also Dobbs 1949; Feacham 1955, 76; RCAHMS 2007, 105–107). The evaluative work carried out to date has revealed a major phase of use of the fort, but has done little to characterize its use, function and longevity.

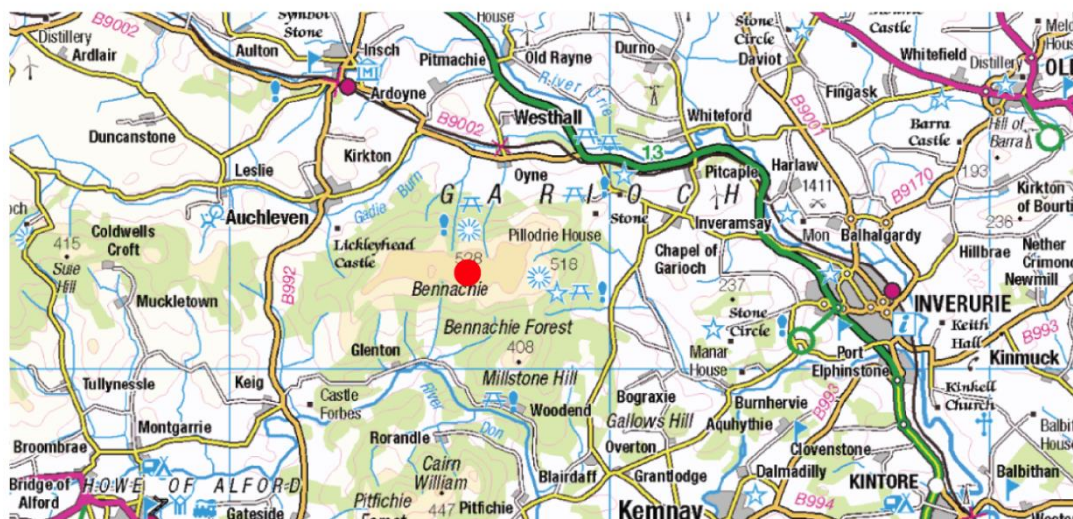


Figure 1 Location of Mither Tap

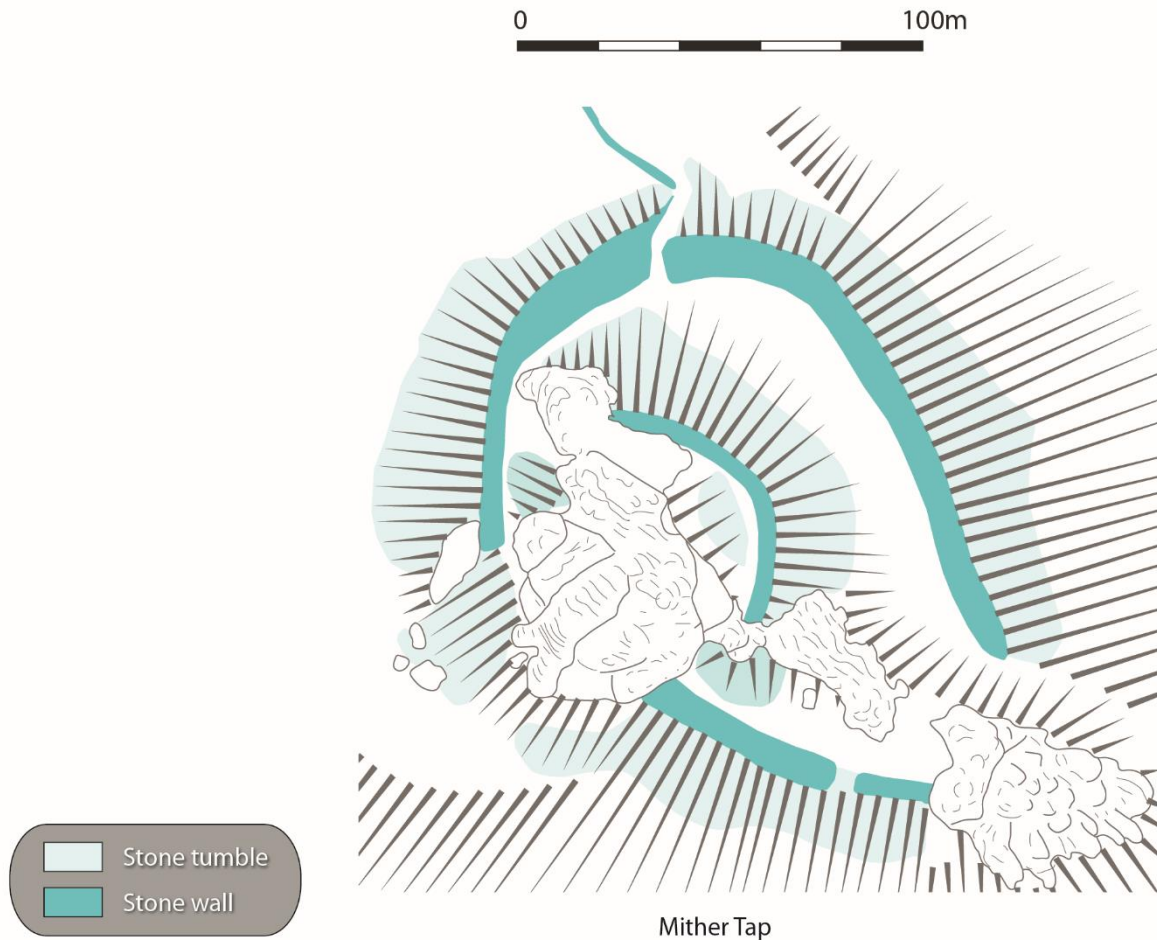


Figure 2 Groundplan of Mither Tap.

THE MONUMENT AND CONTEXT

Mither Tap fort

Mither Tap (Figures 1 and 2) sits atop Bennachie, one of the best-known landmarks in Northeast Scotland. The fort lies on the eastern summit of the hill, atop a craggy granitic tor. The fort is defined by a lower stone-built wall, around 7-8m in width with an entrance on the eastern side. Traces of a possible earlier rampart lie to the west, evident as a low terrace with stone facing surviving to a height of 1.2m, set close to the line of the larger outer citadel rampart, which sits a short distance further downslope. The upper citadel of the fort lies 30m further upslope. This is defined by a further c.7m thick stone wall with a huge scree of rubble spilling downwards from the wallface. The upper citadel encloses a maximum area of 30 x 15m, with the rampart enclosing the area immediately south of the huge granite summit tor. Piles of rubble immediately downslope from the granite tor on the east, west and north sides suggest the summit may have also been enclosed (RCHAMS 2007: 106). The total area enclosed by the defences is 0.65ha.

The OS survey of 1973 recorded the possible traces of a rectangular building in the upper citadel and antiquarian survey by Maclagan reported on a series of roundhouses in both the upper and lower citadels (Canmore ID 85507). A well was recorded in the 19th and 20th century, abutting the southwestern end of the lower rampart wall, but was infilled in the later 20th century. The well was not recorded in the most recent RCAHMS survey (2007: 105-107), but was evident prior to the 2019 excavations on the ground as an infilled boggy hollow at the western extreme of the outer rampart.

The site is largely unrecorded in historical sources, but a gaelic saga, unfortunately lost, *Orgain Benne Ce*, 'The Ravaging of Bennachie', written down by the 10th century, implies that the site was known in the early medieval period and that stories of a catastrophic battle were recorded and recounted after the events depicted (Dobbs 1949; Fraser 2009: 109). The title of another lost gaelic saga, *Orgain Maige Ce la Galo mac Febail*, 'The Ravaging of the Plan of Ce by Galo son of Febal', suggests other major social and political events in the vicinity of Bennachie, somewhere around the watershed of the Urie (Fraser 2009: 109). In the past, Aberdeenshire has been seen as relatively marginal region of Pictland (e.g. Henderson 1967; RCAHMS 2007: 115; Fraser 2009: 109), located between northern and southern Pictland, but excavations at sites such as Rhynie have brought this region into new relief (Noble *et al.* 2013; Noble *et al.* forthcoming). There are no later recorded structures on Mither Tap, but the fort is said to have been re-occupied by Sir Andrew Leslie of Balquhain in the 14th century during a feud with the Earl of Mar (Maclagan 1881: 35).

In 1881 Christian Maclagan reported on field investigation of the fort at Mither Tap (Maclagan 1881). At this time she undertook a survey of the hill and reproduced a detailed plan of the fort showing the upper and lower ramparts, the traces of possible roundhouses in both citadels and recorded the place of the well at the southwest of the southern lower citadel rampart, where the rampart abuts rock outcrop. Maclagan did not believe the larger eastern entrance was original, but pinpointed an additional entrance on the northwest side that she believed was original (Maclagan 1881: 36). Maclagan also recorded a third line of defence – a rampart wall around the base of the granite tor.

Maclagan excavated the site in 1876 and 1878, with the Leslie's of Fetternear and Balquhain providing support in the form of eight workmen tasked with undertaking the digging. An excavation of '40 feet' was apparently made in 1876 near the well in the lower citadel and the excavations were said to have revealed a row of circular houses immediately within the lower citadel rampart. The excavations were extended in 1878 and appear to have been very extensive with various trenches laid along the line of the lower citadel rampart on the western side of the southern entrance with further ruined roundhouses said to extend the entire length of the rampart. Traces of possible roundhouses were also uncovered in the upper citadel by Maclagan. Unfortunately she did not record in detail where her trenches lay, but her plan suggests the trenching covered very significant portions of the interior. The workmen also attempted to put a section through the outer wall to ascertain the height of the rampart, but after digging 8ft (2.5m) down they stopped as "the whole mass gave hints of an intention of descending adown the mountain steep, and life and limb were in danger, so we were left to conjecture its height by only what appeared above ground" (Maclagan 1881: 36). A friend of Maclagan also excavated at the north-western entranceway uncovering the passage-way through the rampart. Maclagan also recorded a possible annexe enclosure on the east side of the outer citadel.

In 2006 in advance of path upgrades by Forestry Commission Scotland (FCS), a cobbled surface and a lower possible occupation surface were found near the southern fort entrance during a watching brief (Atkinson 2006). Two fragments of oak from the lower deposit provided dates of 340-540 and 640-780 cal AD.

The 2019 Northern Picts evaluation of the site focused on more firmly establishing a chronology for the site. Seven evaluation trenches were dug (Figure 3), with the most significant remains found in Trenches 1-4. Trench 1 revealed the very denuded inner wallface and gallery of the outer rampart and an impressive occupation platform built one metre back from the wallface. The gallery (as recounted in Maclagan) had been emptied of all deposits in the 19th century (Maclagan 1881: 36), but sampling was able to take place under the foundation stones of the rampart wall. The occupation platform was also disturbed by antiquarian investigation with the upper 0.3m of deposits at least containing modern glass and other finds. The occupation platform was a particularly exciting development as this had been interpreted as an earlier rampart by RCHAMS surveyors. The occupation deposits coincide with the area in which Maclagan plots various roundhouse structures on her plan (Maclagan 1891: Plate VI). Only one small sondage was excavated to natural within the occupation spread. The building platform and the majority of deposits were left *in situ*.

In Trench 2 the well recorded by Maclagan was also rediscovered. On Maclagan's plan a well on the southern edge of the lower citadel rampart on the east side of the fort was identified. Spiral stairs are depicted within the rectangular well shaft. The remains uncovered during the 2019 fieldwork accord well with this depiction, but unfortunately once again extensive antiquary disturbance was recorded with no *in situ* deposits present in the well shaft.

Trench 3 on the southwest side of the fort located what may be other *in situ* buildings within the fort. A wall line was recorded well inside the projected line of the outer rampart inner wall face and appears to be the wall of a sub-rectangular structure within this part of the fort, though the size of the trench made this difficult to prove conclusively. Finally in Trench 4 in the upper citadel identified more occupation deposits with traces of walling near to the northern trench edge suggesting the presence of another building in this part of the fort. Trenches 5-7 located occupation deposits near the granite tor and outside of the fort.

Dating

Nine radiocarbon dates have been obtained to date from the 2019 Northern Picts fieldwork. All of the dates lie within the 7th-8th century AD and include dating material from under the outer rampart foundation, from the occupation deposits identified in trenches 1-4 and from charcoal spreads in trenches 5-7. These dates suggest a start date for activity in the period cal AD 600-760 (95% probability) and probably cal AD 630-680 (68% probability) and an end date of cal AD 690-810 and probably cal AD 710-780 (68% probability).

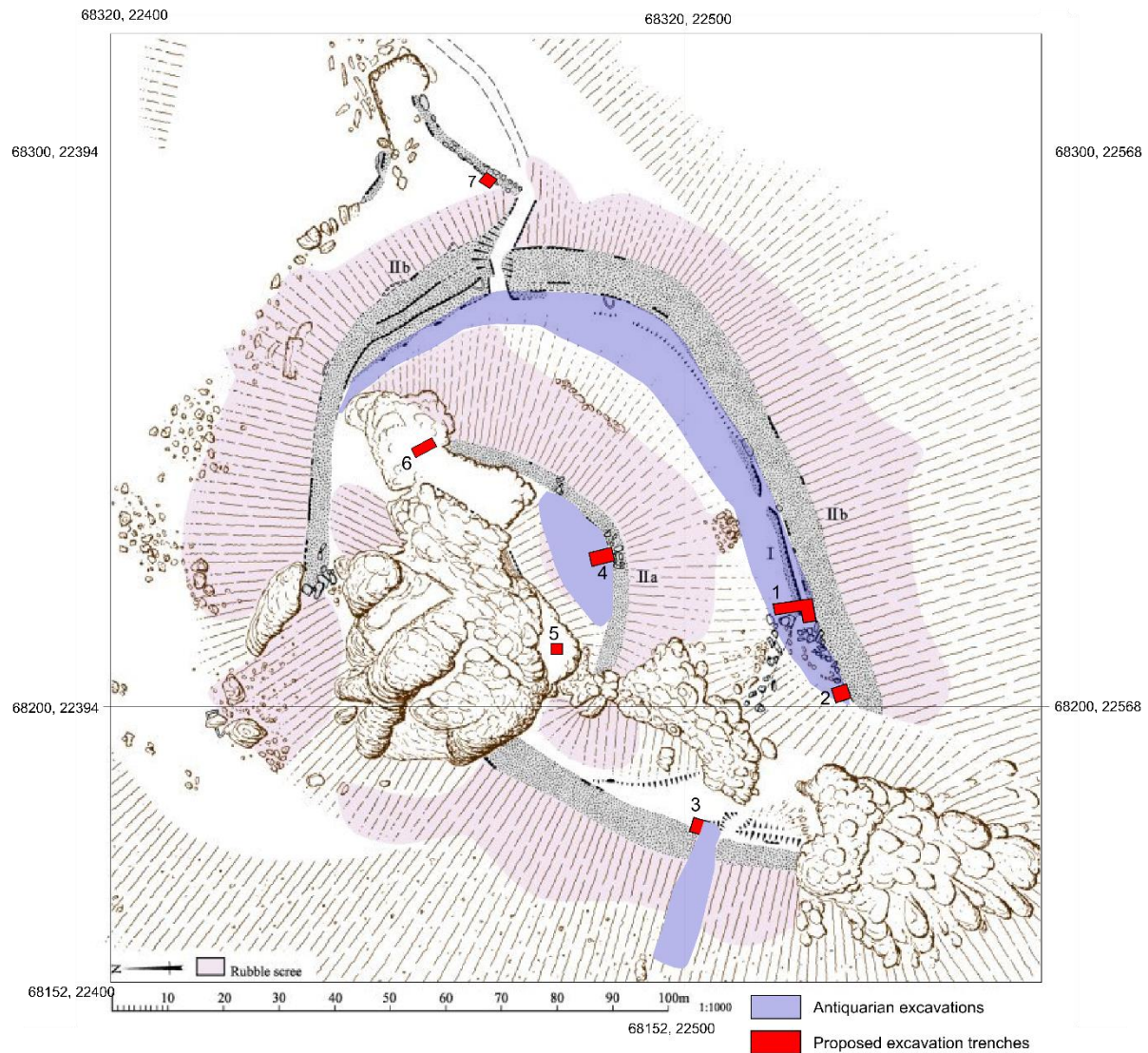


Figure 3 2019 evaluation of the site

Research questions

The 2019 evaluation at Mither Tap has put the chronology of the site on a much firmer footing and has revealed important new structural detail regarding the fort, but given the limited scale of the previous work a number of outstanding questions remain.

1. What is the character of the occupation of the lower citadel? Does the occupation platform relate to a single building in this part of the fort or was this the foundation for multiple buildings as Christian Maclagan's plan and excavations suggest?
2. What role did the gallery feature that runs along the outer rampart wallface play? Was it a functioning space or does it reflect insertion of occupation platforms within an earlier fort/defences? What does the apparent break in its line around 20m from the northern edge of the 2019 trench 1 represent?
3. Given that the inner wallface of the outer rampart identified in 2019 was placed on a huge boulder foundation with rubble deposits underneath, is there evidence for earlier phases of occupation/defence on the hill? What is the date of the outer enclosing works?

4. What is the character of occupation in the upper citadel? Do *in situ* deposits survive here such as floor layers, hearths, postholes, etc?
5. What is the character of the upper citadel rampart at Mither Tap? Antiquarian disturbance seemed particularly extensive here and in 2019 no definite wallface could be identified – can the remains of the rampart here be traced and how does its character and chronology compare to the outer defences?
6. How was the space within the fort organized? Are there any functional or chronological differences to the use and development of interior features in the upper and lower citadels?
7. Was the granite tor enclosed and occupied? The RCHAMS survey suggested so based on scree deposits that have seemingly fallen from the tor, but Maclagan's survey provides potentially clearer evidence with the plotting of a third rampart. Do any traces of this additional enclosing line survive and what does that tell us about use of space and function of the fort?
8. What resources were utilized in rampart construction? Were they timber-laced? The 2019 excavations failed to provide evidence to evaluate these questions.
9. When was the fort(s) first constructed, occupied and abandoned?

A number of questions surrounding the management and designation of the monument are also outstanding:

10. To what extent has antiquarian investigation left *in situ* deposits in the lower and upper citadels?
11. How best might we protect any *in situ* deposits in the future?

NATURE OF THE PROPOSED WORK

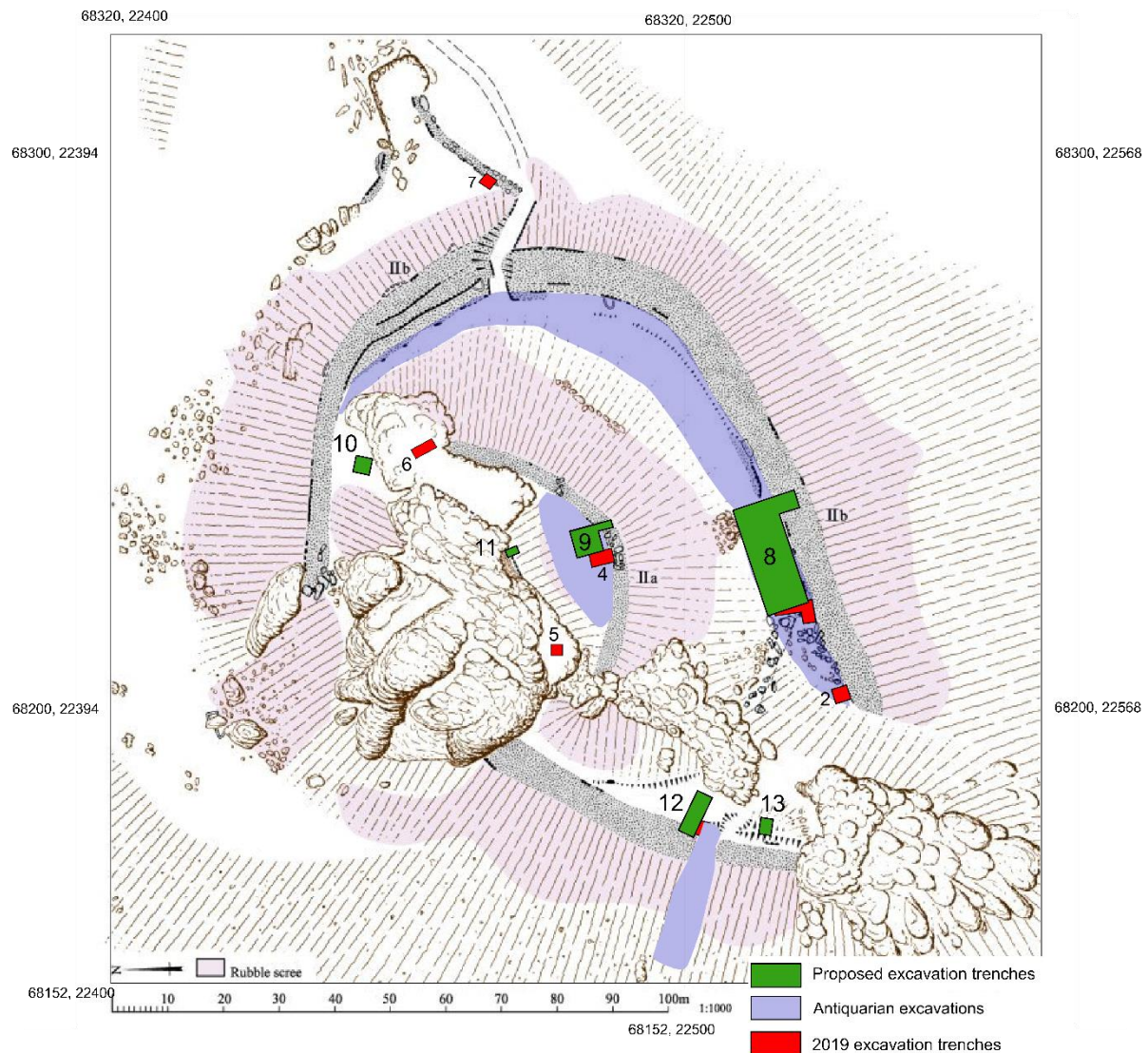


Figure 4 Proposed trenches at Mither Tap in relation to the RCHAMS 2007 survey and the areas impacted by antiquarian trenching and clearing.

At Mither Tap fort, it is proposed to dig a number of new trenches to characterize the monument in more detail and to address the research and management questions outlined above (Figure 4).

Trench 8

Trench 1 covers a significant portion of the lower citadel platforms, but there is reason to believe that this is the most extensively disturbed area of the fort (other than perhaps the upper citadel (trench 9)). The trench will measure c. 20 x 8m, with an additional 4 x 3m extension over the gallery and will reveal one stretch of the occupation platforms that runs from the area of the well to the main entrance of the fort on the northeast (thus this trench will cover a small proportion of the occupation remains preserved in the lower citadel). The 2019 trench 1 and Maclagan's report suggests the gallery was

entirely emptied along this stretch and the 2019 trenching also suggests the occupation deposits on the platform are extensively disturbed with the upper 0.3m containing modern finds and the lower deposits of a very homogenous nature suggesting that these too could be from backfill/19th century excavation. However, the main structural revetment wall on the east appears to be *in situ* and there may be areas less disturbed by antiquarian intervention. The trench will expose an area of the lower citadel platforms in plan (as one open area if safe/practical to do so or in staged openings) to reveal the platform to establish if this supported one building or multiple with modern disturbance removed to reveal any *in situ* wall lines, structural features or *in situ* floors. A small trench extension on the northeast side will allow the relationship of the platform to gallery and rampart wallface to be traced and stratigraphic relations established if possible. This extension will also target an apparent gap in the gallery line as this may help elucidate the function and accessibility of the gallery during the fort's use.

On the area of the platform the approach will involve careful removal of 19th century backfill (this contains early medieval bone deposits) working in plan to assess if any of the lower deposits remain *in situ*, undisturbed by modern activity. The disturbed deposits will be removed to reveal any *in situ* floors/structural features that survive on the platforms with the aim of revealing the latest surviving *in situ* layers and revealing these in plan. Any floor layers or structural features within surviving upper floor layers will be carefully cleaned and fully recorded by record, photography and photogrammetry.

When the 19th century backfill has been removed and the archaeological remains have been cleaned, the approach to sample excavation will be reviewed in consultation with HES and HES recommendations adopted. However, the approach will involve excavating a maximum of 30% of *in situ* deposits within the trench. Targeted excavation will then take place in order to assess the character of the structures/occupation on the platform. Targeted sondages will also be adopted to address the longevity of occupation and depth of any *in situ* deposits in this part of the site with these targeted at areas that will minimize impact on any *in situ* floors or structural remains. Any surviving deposits that can help date the outer defences and gallery use will also be targeted in the trench extension with the wallface of the outer rampart (if present) revealed under tumble/19th century backfill and any surviving deposits within the gallery revealed in plan. Where practical the sampling of individual features such as postholes, hearth deposits or other structural features will leave at least 50% *in situ* for future investigation, with the downslope platform wall, outer rampart wallface and gallery left *in situ*.

Trench 8 will address research questions 1-3, 6 and 8-11.

Trench 9

Trench 4 in the upper citadel in 2019 suggested extensive disturbance of deposits – there was definite disturbance of the upper deposits represented by glass and metal finds, but the very homogenous soil profile revealed in section suggests that at least some of the lower deposits may also be disturbed or redeposited layers from antiquarian excavation in this part of the fort. In support of this was the lack of an obvious wallface to the rampart deposits. However, to the north of trench 4 a line of stones arcing from the probable line of the rampart wall extends westwards and may represent the wall of a structure built up against the rampart with the wall at least perhaps *in situ*. Trench 9 is designed to test the hypothesis that this is a structure and to establish what remains of *in situ* buildings/occupation deposits within this part of the fort.

A larger trench (Trench 9) measuring around 6m by 6m with a 2m by 3m extension on the northeast side will allow a larger area of the upper citadel to be revealed and safe working conditions given the huge boulders encountered in this area in 2019. This trench will extend from trench 4 to the putative wall-line to the north. The obvious upper layers of 19th century backfill will be removed to reveal the lower deposits. The trench will then be taken down in plan to establish if the lower deposits contain *in situ* floor layers and structural features. If these are present the trench will be cleaned to an appropriate level, deposits mapped and a select number of features half sectioned to provide dating evidence for the latest *in situ* occupation deposit. No more than 50% of features will be sampled and these will be targeted to leave deposits *in situ* for future investigation where possible (e.g. postholes half sectioned). The trench extension on the northeast will allow the upper citadel rampart to be targeted with the aim of identifying an *in situ* wallface or *in situ* rampart core deposits for characterizing the nature and date of this phase of enclosure. Sampling here will include a c.2 x 2m sondage up against the wallface if it survives to test the depth of occupation in this area with the wallface left *in situ*. If the wallface is identified this will be left *in situ*. If no wallface is identified, the sondage will be continued into the core of the rampart in a sondage measuring a total of c.2 x 3m to obtain datable deposits and to characterise the character of the rampart construction.

Trench 9 will address research questions 4-6 and 8-11.

Trench 10

Trench 10 will target one of a number of level platforms within the fort interior to assess whether these are simply parts of the natural topography or whether these are archaeological features used perhaps as building stances as occurs in the lower citadel. A c.3 x 3m trench will be excavated here to assess the nature of this platform. Any over-burden, collapse and modern disturbance will be removed with any *in situ* occupation horizons revealed, mapped and sampled for dating. A maximum of 50% of *in situ* deposits will be sampled with the sampling focusing on any structural features or floor deposits revealed and/or the history of occupation through a targeted 1.5 x 3 m sondage if the deposits represent midden or a discard zone of some kind. Features will be targeted in such a way as to leave deposits *in situ* for future investigation where possible (e.g. postholes half sectioned).

Trench 10 will address research questions 4, 6, 9 and 10-11.

Trench 11

Trench 11 measuring c.2 x 4 m will test the area around the granite tor for the presence/absence of the line of defence identified by Maclagan (Maclagan 1881: Plate VI). The trench will abut the base of the granite tor and will extend downslope. Any over-burden and collapse will be removed with any *in situ* structural features and/or occupation horizons revealed, mapped and sampled for dating. A maximum of 50% of *in situ* deposits will be sampled. The sampling will concentrate on trying to establish the character of a rampart if present. If possible a 2 x 1.5 m sondage will be excavated up against the granite tor to assess the depth of deposits in this area of the fort and to try and obtain material on the bedrock for dating initial occupation of this part of the fort. Where possible features will be targeted in such a way as to leave deposits *in situ* for future investigation (e.g. postholes half sectioned).

Trench 11 will address research questions 6-11.

Trench 12

Trench 12 measuring 3 x 8 m will assess another area with possible buildings/structures. The 2019 trench here identified a wallface apparently inside the projected line of the outer rampart. Trench 12 will reopen the 2019 trench and extend beyond it to identify if the rampart wallface is indeed downslope of the wall identified in 2019. The trench will also cover an area where the wall identified in 2019 appears to turn a corner – is this again part of an internal structure or is it part of an elaborate entranceway in this area? Trench 12 will also be extended upslope to test the nature of the deposits extending to the outcrop to the north to assess the presence/absence of in situ occupation deposits inside the fort. The trench will be opened removing any overburden/collapse to reveal any in situ layers/features within the trench. Any features present within the latest occupation deposits will be mapped and a selection (max 50%) sampled. Sampling will include sondages will be excavated next to the fort wallface to provide samples for dating and against the wallface of the structure if present to provide insights into the history of occupation in this part of the fort. No more than 30% of the total deposits within the trench will be excavated with sampling concentrating on trying to *establish terminus post quem* and *ante quem* dates for the outer rampart, interior structure(s) if present and any floor layers/middens inside the rampart/internal structures. The rampart wallface will be left in situ and any other feature will be targeted in such a way as to leave deposits *in situ* for future investigation where possible (e.g. postholes half sectioned; structure walls left in situ apart from targeted sections).

Trench 13

Trench 10 will target another level platforms within the fort interior, this time on the southern part of the lower citadel. A c.3 x 2 m trench will be excavated here to assess the nature of this platform. Any over-burden and collapse will be removed with any *in situ* occupation horizons revealed, mapped and sampled for dating. A maximum of 50% of *in situ* deposits will be sampled. The sampling will be designed to assess the character of any building traces revealed and to provide a basic chronology for the deposits in this trench and is likely to include sondages through any occupation deposits/middens, targeted against any in situ wall faces. Where possible features will also be targeted in such a way as to leave deposits *in situ* for future investigation (e.g. postholes half sectioned; any extant walls left in situ).

Trench 13 will address research questions 1, 6, 9 and 10-11.

JUSTIFICATION FOR PROPOSED WORK

Archaeological evidence for Mither Tap suggests a highly developed fortified site and the lost gaelic sagas suggest that Mither Tap may have been a significant regional centre in the early medieval period. The excavations at Mither Tap will address national priorities as identified in the Scottish Archaeological Research Framework. Fundamentally the project will address the formation and demise of one of the major documented cultural groups of ancient Scotland – the Picts and one of their major elite centres of northern Pictland (Medieval panel recommendations 2.8.1; 2.8.2). The development, character and meaning of enclosure over time at a regional and national level (ScARF Iron Age panel recommendation 6.9) will also be addressed by the new phase of investigation. Previous work by the University of Aberdeen in Aberdeenshire has uncovered an early Pictish centre

at Rhynie and work by the university and Murray Cook has identified a series of smaller-scale enclosed sites dating to the early medieval period. However, key questions remain about the nature of later first millennium AD fortified centres and in particular the dating and evolution of nuclear hillforts which appear to have become major seats of power in the later first millennium AD. In particular due to the lack of recent excavations of nucleated forts we are lacking a clear chronology for these sites and our understanding of what these sites contained is similarly poor. With the exception of the recent excavations at King's Seat, Perthshire, there is only one building known from the interior of a Pictish nuclear fort – that at Clatchard Craig, Fife and at King's Seat only one building that was extensively disturbed was identified. The evidence for multiple buildings/platforms at Mither Tap is highly unusual and although antiquarian disturbance is clearly a factor excavation here still represents an excellent opportunity to understand at very least the character and density of the occupation within a fort of this nature. The work of Northern Picts more generally is contributing to new understandings of the rise and fall of the Picts and how power was underpinned by elite centres such as Mither Tap. The ScARF Medieval panel highlights the need to move beyond small-scale excavation to more fully understand these important sites (ScARF Medieval Panel 3.3), with the Iron Age panel also noting that due to very limited work in the interiors of enclosures there is “a severe constraint” on our understanding of these sites. The panel also notes there are also real difficulties in connecting interior activity to enclosure sequences – both of these points will be directly addressed by the new phase of work at Mither Tap.

The sampling strategy outlined here aims to fill in important gaps in our knowledge regarding Pictish elite centres through a measured approach that will allow key elements of the site to be revealed in plan with sub-sampling conducted within the trenches. The work in the lower and upper citadels will assess the impact of MacLagan's trenching on the site and will aim to reveal *in situ* occupation horizons in plan for characterizing the use of the fort interior. In accordance with HES Scheduled Monument Consents Policy (2019), Section SMP2 the work proposed adopts an approach that aims for a low level of intervention for maximum information retrieval – all of the larger trenches will involve re-assessing areas targeted in antiquarian interventions. Moreover, the impacts are specifically targeted and researched with a very experienced team undertaking the work. The proposed trenches will target 2.8% of the area of the original fort and much less than that will be excavated. In addition to the structural detail, work in the lower citadel also shows there is good economic data that can be retrieved. The rich animal bone assemblage from the lower citadel, for example, will provide a very rare insight into the Pictish economy – our knowledge of the early medieval economy is very limited indeed, particularly that of the animal-based economy, with assemblages “scanty” and from excavations of Pictish enclosures particularly slight (ScARF Medieval Panel 3.5). The faunal remains from Mither Tap will provide excellent comparative material for ongoing excavations at Burghead, King's Seat and archive sites such as Clatchard Craig.

In accordance with Scheduled Monument Consents Policy (2019), Section SMCP1/SMCP3, the project will aim to increase the cultural significance of the site and the results will offer new interpretation opportunities for visitors and the local community at what is a site of intense public interest in Northeast Scotland. An enhanced understanding of the site's cultural significance and dating will be of wide public and academic interest. The project will be run in co-operation with the Bailies of Bennachie, a community organisation who work to preserve and promote the amenity of the hill, encourage visitors to the landscape and promote understanding of the hill's cultural heritage. The public appetite for new work at Mither Tap is extensive, with social media posts on the 2019 work the

most widely shared and commented upon in the history of the Northern Picts project, with one twitter post alone having 2030 engagements and 31,146 impressions with the posts on Mither Tap shared internationally. Community volunteers through the Bailies will help with the excavation under appropriate supervision helping upskill community members in the techniques of archaeological investigation helping address major aims of Scotland's Archaeology Strategy. An open day will also be held as part of the programme of investigation and daily tours of the archaeology will allow visitors to engage with the archaeology and heritage of the site.

References

Aberdeenshire Council's Archaeology Service HER Site Record for Mither Tap

<https://online.aberdeenshire.gov.uk/smrpub/master/detail.aspx?tab=main&refno=NJ62SE0001>

Viewed 06/08/2018.

Atkinson, D. (2006) *Mither Tap Fort, Bennachie, Aberdeenshire: Results of an Archaeological Watching Brief*. Edinburgh: Headland Archaeology, Unpublished Data Structure Report.

Canmore database on Mither Tap <https://canmore.org.uk/site/85507/mither-tap-of-bennachie> viewed 06/08/2018.

Dobbs, M. (1949) Cé: the Pictish name of a district in eastern Scotland. *Scottish Gaelic Studies* 6, 137–138.

Feacham, R. W. 1955. Fortifications. In Wainwright (ed.), 66–86.

Fraser, J. E. (2009) *From Caledonia to Pictland: Scotland to 795*. Edinburgh: Edinburgh University Press.

HES Policy Statement June 2016 <https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=f413711b-bb7b-4a8d-a3e8-a619008ca8b5>

Maclagan, C. 1881. *Chips from Old Stones*. Edinburgh: George Waterston & Sons.

Noble, G., Gondek, M., Campbell, E. & Cook, M. (2013). 'Between prehistory and history: the archaeological detection of social change among the Picts'. *Antiquity*, vol 87, no. 338, pp. 1136-1150.

Noble, G., Gondek, M., Cambell, E., Evans, N., Ross, A. and Taylor, S. A Powerful Place Of Pictland: Interdisciplinary Perspectives On A Power Centre of the 4th to 6th Centuries AD. *Medieval Archaeology* XX.

Ralston I. B. M. (2004) *The Hill-forts of Pictland since the Problem of the Picts*. Rosemarkie: Groam House Museum.

RCAHMS (2007) *In the Shadow of Bennachie: A Field Archaeology of Donside, Aberdeenshire*. Edinburgh: Royal Commission on the Ancient and Historical Monuments of Scotland and Society of Antiquaries of Scotland.

Scottish Archaeological Research Framework - www.scottishheritagehub.com

Wainwright, F. T. (ed.) (1955) *The Problem of the Picts*. Edinburgh: Nelson.

Appendix 1 Methodologies, sampling and resources

- The trench sizes will be of the order stated here, but we would like to apply for an additional 3m² per trench to allow for contingencies such as extending for health and safety or logistical reasons or to reveal a particular feature in plan at the trench edge.
- In addition we would like to have the contingency of allowing steps of a maximum of 1m wide to be excavated around any of the larger trenches through collapse, or 19th century or later overburden if needed for health and safety reasons.
- Trenches may be cordoned off with rods and barrier tape – the rods will be inserted no deeper than 0.1m into the ground – which in every trench in 2019 was well within topsoil, collapse or antiquarian disturbed deposits.
- All trenches will be excavated stratigraphically and there will be a written record on proforma context sheets and/or tablet-based recording
- Specialist advice on any artefacts retrieved will be available from Dr Ewan Campbell, the leading Iron Age and early medieval artefact specialist in Scotland
- Environmental processing will be conducted at the University of Aberdeen and in consultation with Dr Susan Ramsay, who has analysed the botanics for the Northern Picts project from 2011 onwards. Environmental sampling will follow English Heritage guidance (Campbell, G, Moffett, L and Straker, V 2011).
- Specialist advice on animal and human bones recovered will be available from Dr Masson-Maclean, University of Aberdeen
- Any complex archaeological deposits where post-excavation budgets are not sufficient to deal with, will be left in situ and not excavated
- During the excavations all archaeological features will be carefully cleaned and recorded (hand and digitally planned at 1:20 and photographed).

Reinstatement plans and post-excavation site management strategy

At Mither Tap all excavated material will be reinstated. This will follow a staged process. If the existing turf is in good condition the trench will be backfilled and returfed using the existing sods that will be stacked during the excavation and watered if need be. If there are issues with stability during reinstatement or afterwards the strategy will be reassessed. Options including re-seeding or stabilisation matting will be explored and completed at the expense of the project. If matting is used this will be biodegradable – jute based or coir based with eco pegs put in place to retain the matting below topsoil and/or turf cover. The trenches will be monitored until fully re-established. No issues were identified with reinstatement in 2019.

Team and implementation of research design

The excavation team involves two site directors Gordon Noble and James O'Driscoll who have both over ten years of experience of running large-scale field projects. Experienced site directors and supervisors will be on site at all times to monitor the progress of the excavations. We will maintain a ratio of 1:3 experienced to non-experienced diggers Volunteers and archaeology students from the University of Aberdeen will work on site under close supervision. The site directors will supervise all

excavation work and will be assisted by the research assistant for Comparative Kingship project Edouard Masson-Maclean who has a background in commercial and academic archaeology. Post-excavation analysis will benefit from the facilities and expertise available in-house at the University of Aberdeen. The research design has been formulated with over ten years of experience of working on Pictish sites in Northern Scotland and will be achievable in the time-scale set.

Resources to carry out works

The project is funded through the Leverhulme Trust for the Comparative Kingship project and through funding for the Northern Picts project.

Publication

The final outcome will be a series of academic articles and contributions to monographs.

Post-excavation and sampling strategy

The budget includes funds for object analysis, botanics and conservation.

Artefacts

Procedures will follow those of previous seasons and advice will be sought from conservators for any unusual items/materials recovered. Finds will be collected, cleaned and conserved where needed and will be analysed by specialists.

Faunal material

Animal bones from a number of early medieval sites excavated as part of Northern Picts are currently being assessed by Edouard Masson-Maclean, University of Aberdeen. His analysis will focus on assessing the composition of the assemblage and comparing it to other early medieval assemblages from Pictland and other contemporary sites across Britain and Ireland.

Soil samples

During the excavation of all sites soil samples will be taken from features using standardised methodologies. This will consist of 20 litres of soil being sampled from features where possible (though note some contexts will be smaller than this) for charcoal and macroplant analysis. Additional samples will be taken from occupation horizons and midden deposits for detailed faunal analysis including presence/absence of fish bone. Small cut features will be sampled 100% through a combination of dry sieving and flotation. Sampling will be particularly targeted at key contexts for dating. All animal bones will be retained and analysed by in house specialists. Small 0.1 litre samples will be taken on a 1 m grid for geochemical analysis of any in situ floor layers of buildings along with soil micromorphology samples to assess deposit formation.

Samples will be double bagged and labelled. Samples will be floated using bucket sieving which allows for more controlled recovery of charcoal. 1mm and 500 µm mesh will be used to capture the charcoal and botanics. The flots and retents will be sorted and carbonised plant remains assessed by a botanist for their potential for radiocarbon dating and botanical analysis. The soil sieving will be undertaken by students under the supervision of the project manager.

Radiocarbon dating

Dating will be provided by funding through the Comparative Kingship programme and through Forestry Commission Scotland funding. Derek Hamilton of SUERC will advise on sample selection throughout and will model the dates using OxVal c4.2 and standard Bayesian modelling approaches. The work at Mither Tap will aim to produce a more detailed chronology for the ramparts and any in situ interior deposits in the upper and lower citadels. Procedures will follow those established at Rhynie and Burghead and analysis will proceed in consultation with Derek Hamilton and SUERC.

Reporting

We will notify HES of the timescale of each excavation in advance of each phase of works, giving at least 2 weeks notice. We will provide a DSR and PERD for the excavations within 3 months of completion of the fieldwork. The approved DSR will then be sent to Aberdeen Council Archaeology Service, and DES and OASIS entries will be submitted. The archive will remain at the University of Aberdeen until completion of the study when it will be housed with a relevant body (The HES National Record of the Historic Environment).