



# HILL-FORTS OF THE INNER TAY ESTUARY

## PERTH

### PERTH AND KINROSS

### Phase Two

## Archaeological Survey Report



**Oxford Archaeology North**

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## SUMMARY

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Oxford Archaeology North (OA North) was invited by David Strachan and Johanna Babbs on behalf of the Tay Landscape Partnership, to undertake a series of two archaeological surveys of hillforts located in the Inner Tay Estuary near Perth, Perth and Kinross. At Law Hill, Arnbathie (SAM 3089; NO 170 258) and Pole Hill, Evelick (SAM 3095; NO 199 257). The surveys were undertaken between 3<sup>rd</sup> and 7<sup>th</sup> September 2012. The aim of the project was to provide archaeological field surveys of the two identified hillforts that will aid the development of an excavation strategy, planned to take part over the delivery phase of the Tay Landscape Partnership (TLP) scheme. The surveys present a thorough record of all the archaeological structures and components identified on each of the hillfort sites in the form of a series of detailed and annotated measured plans. Both hillforts have already been subject to detailed archaeological survey (RCAHMS 1994, 53), however new surveys were required using modern survey techniques to be output at a greater resolution of detail.

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## ACKNOWLEDGEMENTS

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Oxford Archaeology North would like to thank David Strachan of the Perth and Kinross Heritage Trust, and Johanna Babbs of the Perth & Kinross Countryside Trust, on behalf of the Tay Landscape Partnership for commissioning the project. We would also like to thank Sarah Malone, Heritage Officer at Perth and Kinross Heritage Trust for providing relevant HER data and Mark Pennycook at The Environment Service, Perth and Kinross Council for providing digital Ordnance Survey mapping.

The archaeological surveys were undertaken by Peter Schofield. The report was written by Peter Schofield and the illustrations were by Anne Stewardson. GIS shapefiles of the surveys were created by both Anne Stewardson and Anna Hodgkinson. The report was edited by Murray Cook, who also managed the project.

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## 1. INTRODUCTION

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### 1.1 CIRCUMSTANCES OF THE PROJECT

1.1.1 Oxford Archaeology North (OA North) was invited by David Strachan and Johanna Babbs on behalf of the Tay Landscape Partnership, to undertake a series of two archaeological surveys of hillforts located in the Inner Tay Estuary near Perth, Perth and Kinross. OA North was commissioned to undertake the project after tendering via the written project brief for Phase One of this project as supplied by David Strachan (*Appendix 1*). The surveys were undertaken as part of a wider HLF funded community archaeology project that will potentially be investigating up to ten hillforts in the region (Strachan, 2012). The hillforts surveyed as part of the present phase of investigation consisted: Law Hill, Arnbathie (SAM 3089; NO 170 258) and Pole Hill, Evelick (SAM 3095; NO 199 257). Both hillforts have already been subject to detailed archaeological survey by the RCAHMS between 1989-1992 (RCAHMS 1994, 53), however new surveys, as part of the present project, were required using modern survey techniques and with survey output at a greater resolution of detail. The surveys were undertaken between 3<sup>rd</sup> and 7<sup>th</sup> September 2012. An earlier phase of survey has already been undertaken on four further hillforts, that have been reported separately (OA North 2012).

### 1.2 AIMS AND OBJECTIVES

1.2.1 The aim of the project was to provide archaeological field surveys of the four identified hillforts that will aid the development of an excavation strategy, planned to take part over the delivery phase of the Tay Landscape Partnership (TLP) scheme. The Partnership aims to ‘celebrate and enhance for future generations the cradle of medieval Royal Scotland: a tryst of landscapes, where the rivers Tay and Earn converge to give the place its unique character’. The overall scheme is currently in its Development year March 2012 – February 2013. Phase 1 delivery of the project will take place 2013 – 2016.

1.2.2 The detailed topographic surveys present a thorough record of all the archaeological structures and components identified on each of the hillfort sites in the form of a series of detailed and annotated measured plans (Figs 2-5). In the case of the hillfort at Abernethy the survey also recorded the outlines of previous antiquarian excavations on the site

1.2.3 The hillforts are late-prehistoric/early-historic defended sites of significant archaeological importance, both in terms of buried archaeological deposits and as monuments within the wider landscape (Strachan 2011). Significant elements at the core of all four hillforts surveyed during the present phase of the project are statutorily protected as Scheduled Monuments of national importance.

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## 2. METHODOLOGY

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### 2.1 INTRODUCTION

2.1.1 The project comprised a programme of detailed topographic surveys to RCAHMS Level 4 standards (RCAHMS Survey and Recording Policy 2004) at each of the two relevant hillforts (Fig 1). The surveys were produced at a scale of 1:500 to be output as figures scaled between 1:750 and 1:1250 for the present report (Figs 2-5). The result of the surveys, were informed and augmented by an earlier desk-based assessment (Strachan 2011) but no further detailed analytical description was required.

### 2.2 DETAILED TOPOGRAPHIC SURVEY

2.2.1 *GPS Survey:* the detailed topographic surveys were undertaken using a survey grade differential GPS. The GPS is a Leica 1200 differential system and uses Ordnance Survey base stations in conjunction with a roving station to correct the raw data with corrections transmitted by mobile phone. The accuracy of the OA North GPS system is capable of +/- 0.02m and provides for a quick and effective means of generating detailed survey data. A series of control points were established at each of the sites to allow the survey to be built upon through the project. Survey pegs were only inserted outside of the Scheduled Monument areas, and further control points were added to fence posts and other more robust structures found within the Scheduled Monument curtilages.

2.2.2 *Drawing Up:* the raw data from the GPS was combined with LiDAR data within a CAD system and plots were generated to enable the sites within the field to be drawn-up. The archaeological detail was drawn-up as a dimensioned drawing on the plots with respect to survey markers. On completion of the field survey, the drawings were enhanced within the CAD environment to produce the final drawings. The earthworks were depicted with hachures alongside associated topographic detail and, where possible, the stratigraphic relationships between features have been indicated. Full ground modelling of the earthworks was not undertaken, although contours were depicted at appropriate intervals to show the relationship of the features of archaeological interest to the natural topography.

2.2.3 *Survey Outputs:* a short report presenting the results of the surveys, consisting a summary, acknowledgements, introduction, methodology, survey drawings and project brief. An executive summary document summarising the project report for downloading from the Tay Landscape Partnership website. Arcview compatible shapefiles of all topographic survey layers created from the CAD drawings.

### 2.3 ARCHIVE

2.3.1 A short summary report will be submitted to the OASIS database (for dissemination to the National Collection of RCAHMS and the Local Historic Environment Record) and Discovery and Excavation in Scotland.

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### 3. BIBLIOGRAPHY

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#### 3.1 SECONDARY SOURCES

- Ainsworth, S, Bowden, M, and McOmish, D, 2007 *Understanding the Archaeology of Landscapes: a guide to good recording practice*, English Heritage, Swindon
- Association of County Archaeological Officers (ACAO), 1993 *Model briefs and specifications for Archaeological Assessments and Field Evaluations*, Bedford
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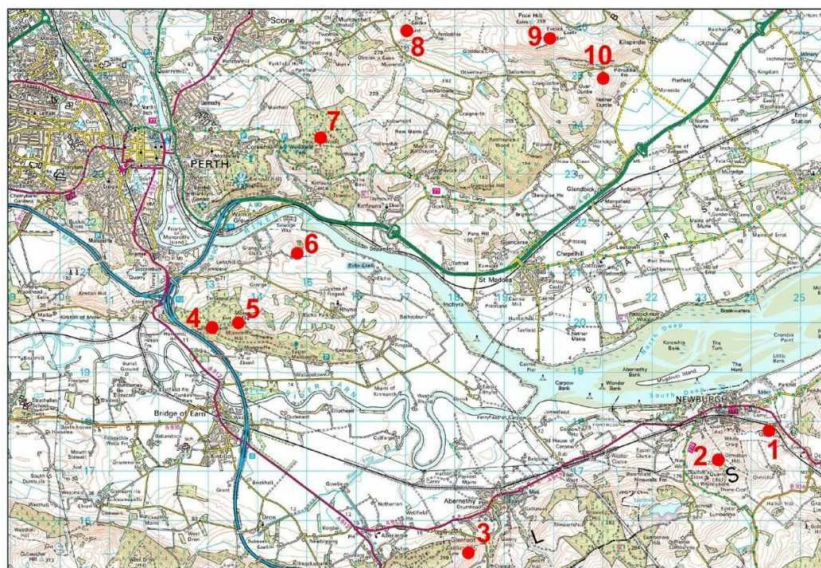
## APPENDIX 1: PROJECT BRIEF

### Brief for Archaeological Survey

**Project:** Hill-forts of the Inner Tay estuary  
**Brief prepared by:** David Strachan, Perth and Kinross Heritage Trust (PKHT)  
 on behalf of the Tay Landscape Partnership

Site	NGR	SAM	CONDITION	DEFENCES	Phases
1. Clatchard Craig	NO 243 178	-	DESTROYED	Multi-	3
2. The Ring, Ormiston Hill	NO 233 171	-	EARTHWORK	Uni-	1
3. Castle Law, Abernethy	<b>NO 182 153</b>	<b>2477</b>	<b>EARTHWORK</b>	<b>Bi-</b>	<b>2</b>
4. Moncreiffe Hill	<b>NO 182 153</b>	<b>9438</b>	<b>EARTHWORK</b>	<b>Uni-</b>	<b>1</b>
5. Moredun Top	<b>NO 136 200</b>	<b>9440</b>	<b>EARTHWORK</b>	<b>Multi-</b>	<b>3</b>
6. Dow Hill	NO 148 214	6718	CROPMARK	Multi-	?
7. Grassy Law, Deuchny Wood	<b>NO 152 236</b>	<b>6199</b>	<b>EARTHWORK</b>	<b>Bi-</b>	<b>?</b>
8. Law Hill, Arnbathie	NO 170 258	3089	EARTHWORK	Multi-	?
9. Pole Hill, Evelick	NO 199 257	3095	EARTHWORK	Multi-	?
10. Over Durdie, Pitroddie Den	NO 209 249	7225	CROPMARK	Multi-	?

Above: sites in the area: **NB this survey will involve work at sites 3, 4, 5, and 7.**



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The location of sites around the estuary: see *Hill-forts of the Tay/Earn Confluence. Desk-based Assessment*. Strachan, D (PKHT) March 2012.

**Summary:**

A minimum of three measured archaeological surveys are required of selected hill-forts around the Inner Tay estuary to aid the development of an excavation strategy, planned to take part over the delivery phase of the Tay Landscape Partnership (TLP) scheme. This will involve the production of a series of detailed and annotated measured plans with associated contour survey at 1:100 and a series of basic unannotated site plans with topographic hachures at 1:500.

A more detailed survey of a fourth site (Abernethy) is required to record the outlines of previous excavations on the site.

**Site Location and Description:**

The hill-forts are late prehistoric / early historic defended sites of significant archaeological importance, both in terms of buried archaeological deposits and as monuments within the wider landscape. Several of the sites are scheduled as monuments of national importance, as outlined above.

The hill-forts are of simple drystone construction, many in a spread and ruinous condition, most with considerable elements buried beneath either soil or rubble debris. It is anticipated that dGPS survey methodology will be used, as a detailed stone-by-stone record is not required, although it is anticipated that the surveys should be undertaken in such a manner as to permit this possibility during future elements of the project.

**Client contact/timetable:**

Access for the survey work will be arranged by PKHT on behalf of the Tay Landscape Partnership -

- David Strachan, PKHT; 01738 477081, mobile 07794 317234, email: [dlstrachan@pkc.gov.uk](mailto:dlstrachan@pkc.gov.uk) )

The work should be carried out by the end of May 2012, after which vegetation cover will obscure parts of the sites.

**Techniques required:**

The project requires the measured survey of the hill-forts alongside supporting photography (both interior and exterior). The measured surveys should be presented alongside associated topographic detail, recorded by contour survey (at 0.5m intervals) to a distance of c.10m from the site extent. The work should be carried out to RCAHMS Level 4 standards (RCAHMS Survey and Recording Policy 2004). The series of plans should be presented at a scale of 1:100 (detailed measured archaeological survey with contour survey) and 1:500 (basic site outline with topographic hachures).

In addition, outside the Scheduled Area of each of the surveyed sites, at least three control points should be established to allow the survey to be built upon through the project.

**Reporting Requirements:**

Finished plans should be sent to Tay Landscape Partnership in digital format on CD/DVD (in PDF and doc formats). A short report should also be submitted to the OASIS database (for dissemination to the National Collection of RCAHMS and the Local Historic Environment Record) and Discovery and Excavation in Scotland.

## Appendix 1

### Information on the Tay Landscape Partnership

The Tay Landscape Partnership (TLP) is a joint project managed by Perth & Kinross Heritage Trust and Perth & Kinross Countryside Trust. It brings together a variety of partners with an active interest in the local landscape including Perth & Kinross Council, the Tay and Earn Trust and local communities. The Partnership aims to 'celebrate and enhance for future generations the cradle of medieval Royal Scotland: a tryst of landscapes, where the rivers Tay and Earn converge to give the place its unique character'. The scheme is currently in its Development year March 2012 – February 2013. Phase 1 delivery of the project will take place 2013 - 2016.

The 200km<sup>2</sup> area is centred on the River Tay from Scone to its confluence with the River Earn, and on down the estuary as far as Longforgan and Newburgh. It lies between the Perth & Kinross and Fife Ochil Hills and the western Sidlaw Hills and includes the Carse of Gowrie, Kinnoull and Moncrieffe Hills, and Forteviot in Strathearn (Appendix. 2). The landscape of this area is heavily influenced by the underlying geology, largely comprised of igneous rocks overlain by deposits of Old Red Sandstone sedimentary rocks. Later glacial activity more easily eroded the softer sedimentary rocks leaving Strathearn low lying between the steep sided hills of the Ochils and Sidlaws. At the end of the last Ice Age, sea levels rose, flooding large parts of the Tay estuary and Strathearn, creating raised shorelines that are visible today, together with the carseland deposits of clay and soft sediments. It was this area that influenced Sir Patrick Geddes and inspired his vision of the Valley Section: his conceptual model for bringing together culture and environment in a landscape.

The Partnership area includes the meeting of several environments: estuarine, river valleys and lowland hills. In addition to the rivers and upper estuary, the area includes ancient and semi natural woodland, traditional orchards, forestry, rich agricultural land, upland pasture, saltmarsh and small lochans. The area includes several Sites of Special Scientific Interest (Biological and Geological), a Special Protection Area, and two Special Areas of Conservation due to its internationally important river system, reedbeds, mudflats, fish, birds and mammals.

Humans have lived in and influenced the landscape since Mesolithic times and they have left behind their buildings, structures and monuments which contribute importantly to the history of Scotland. Some of these are visible structures, such as the hill forts and historic buildings, and many are designated as nationally important Scheduled Monuments and Listed Buildings. Further, there are seven conservation areas, which are judged to have special character by virtue of the distinctiveness and quality of their townscape. In addition, there are several gardens and designed landscapes of note.

#### Landscape Partnership Schemes

Landscape Partnerships is Heritage Lottery Fund's grant giving initiative offering grants for schemes led by partnerships which aim to conserve areas of distinctive landscape character throughout the UK. Successful schemes must meet the four programme priorities which are:

- conserving or restoring the built and natural features that create the historic landscape character;



- increasing community participation in local heritage;
- increasing access to and learning about the landscape and its heritage; and
- increasing training opportunities in local heritage skills.

For further information on what is required within the context of a Landscape Partnership Scheme please refer to the Second Round Help notes

<http://www.hlf.org.uk/HowToApply/programmes/Documents/LPSAHelpNotes02round.pdf>

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## ILLUSTRATIONS

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### **FIGURES**

- Figure 1: Site Location
- Figure 2: Law Hill Hillfort, Arnbathie – overall plan
- Figure 3: Law Hill Hillfort, Arnbathie – north detail
- Figure 4: Law Hill Hillfort, Arnbathie – south detail
- Figure 5: Pole Hill Hillfort, Evelick

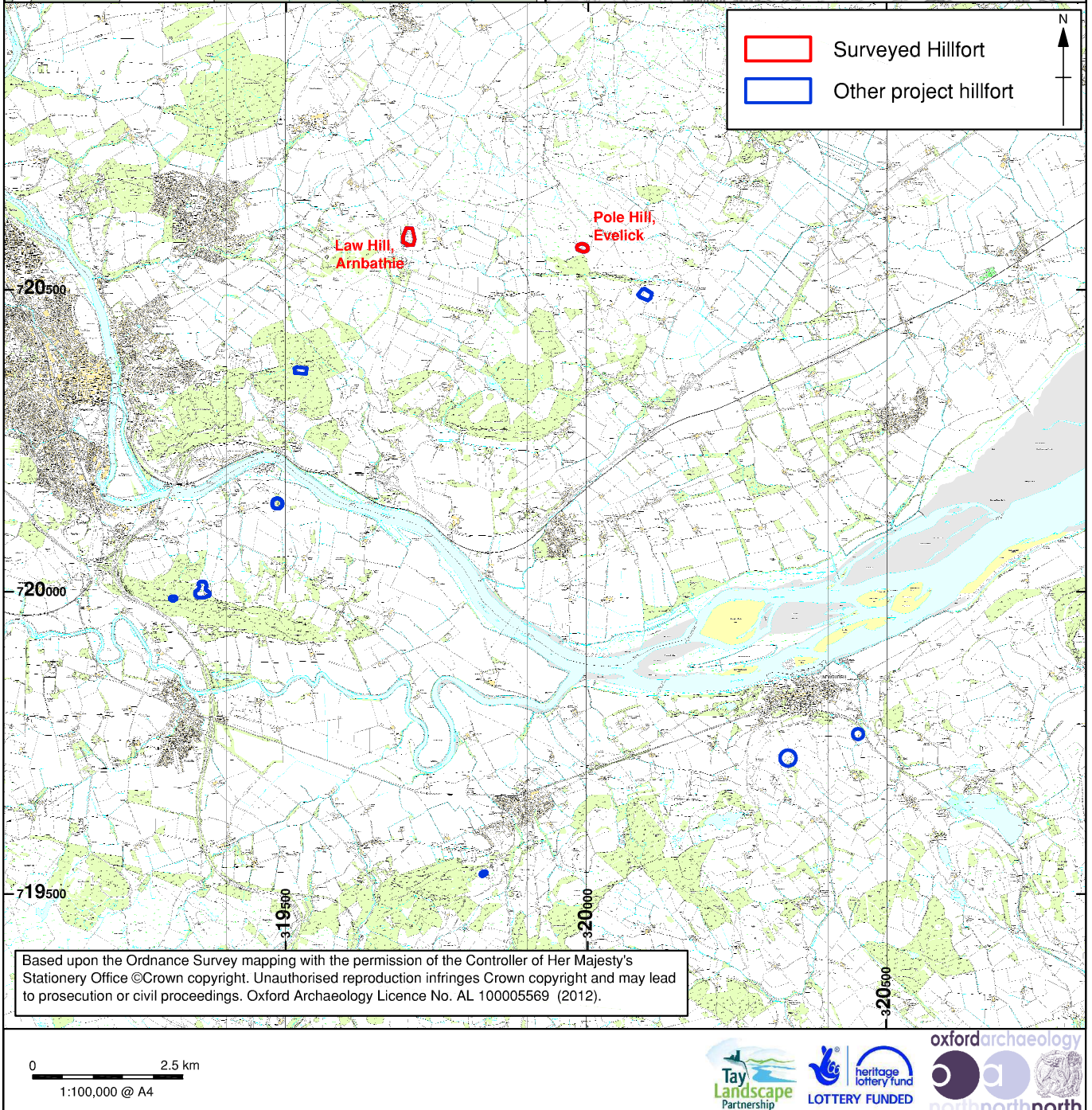
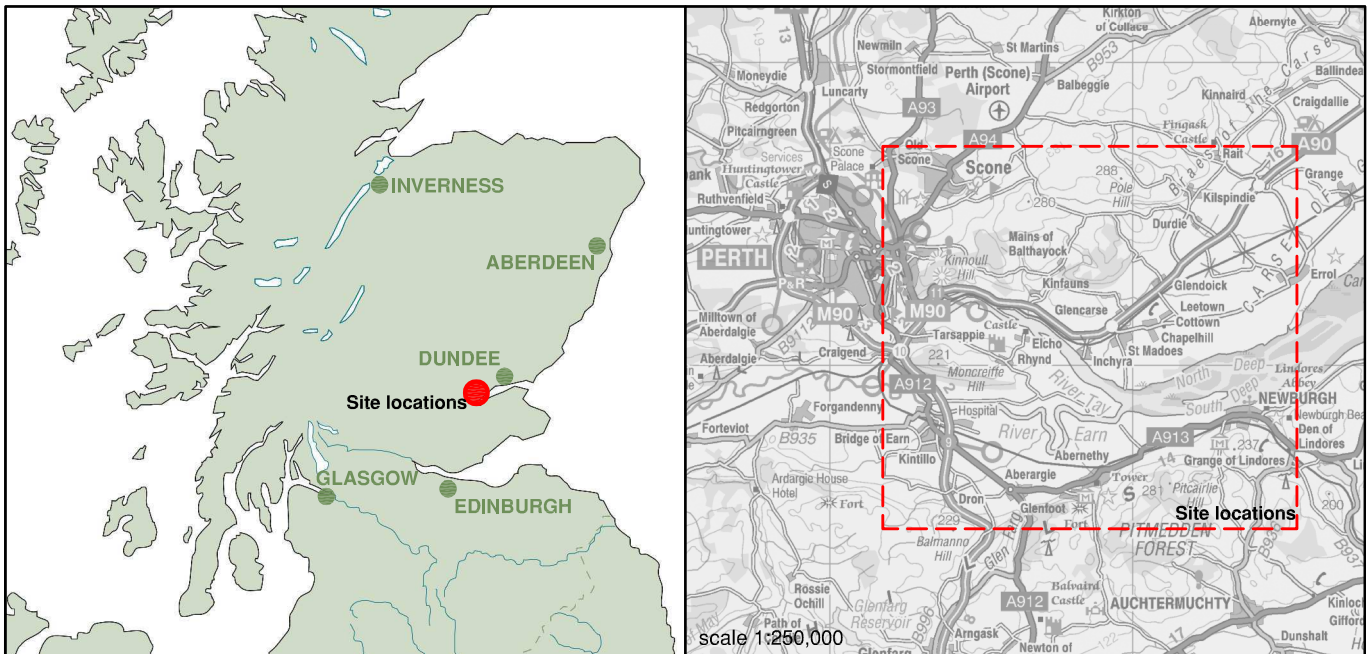


Figure 1: Site location

MC\*L10492b\*AMS\*110912





Figure 2: Law Hill Hillfort, Arnbathie - overall plan





MC\*L10492b-Law-Hill\*AMS\*200912

- |     |                 |       |                    |     |                            |   |                        |   |                      |   |                  |
|-----|-----------------|-------|--------------------|-----|----------------------------|---|------------------------|---|----------------------|---|------------------|
| --- | Top of slope    | ..... | Contour            | --- | Scheduled area             | ■ | Data taken from RCAHMS | ● | Pink granite boulder | ■ | Later earthworks |
| --- | Bottom of slope | ~~~~~ | Rock outcrop/cliff | ■   | Original rampart           | ⊗ | Modern cairn           | ● | Standing stone       | ■ |                  |
| ▲▲▲ | Earthwork       | ---   | Trackway           | ■   | Original rampart (assumed) | ■ | Boggy area             | ● | Recumbent stone      |   |                  |

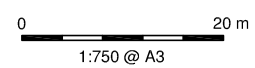






Figure 3: Law Hill Hillfort, Armbathie - north detail



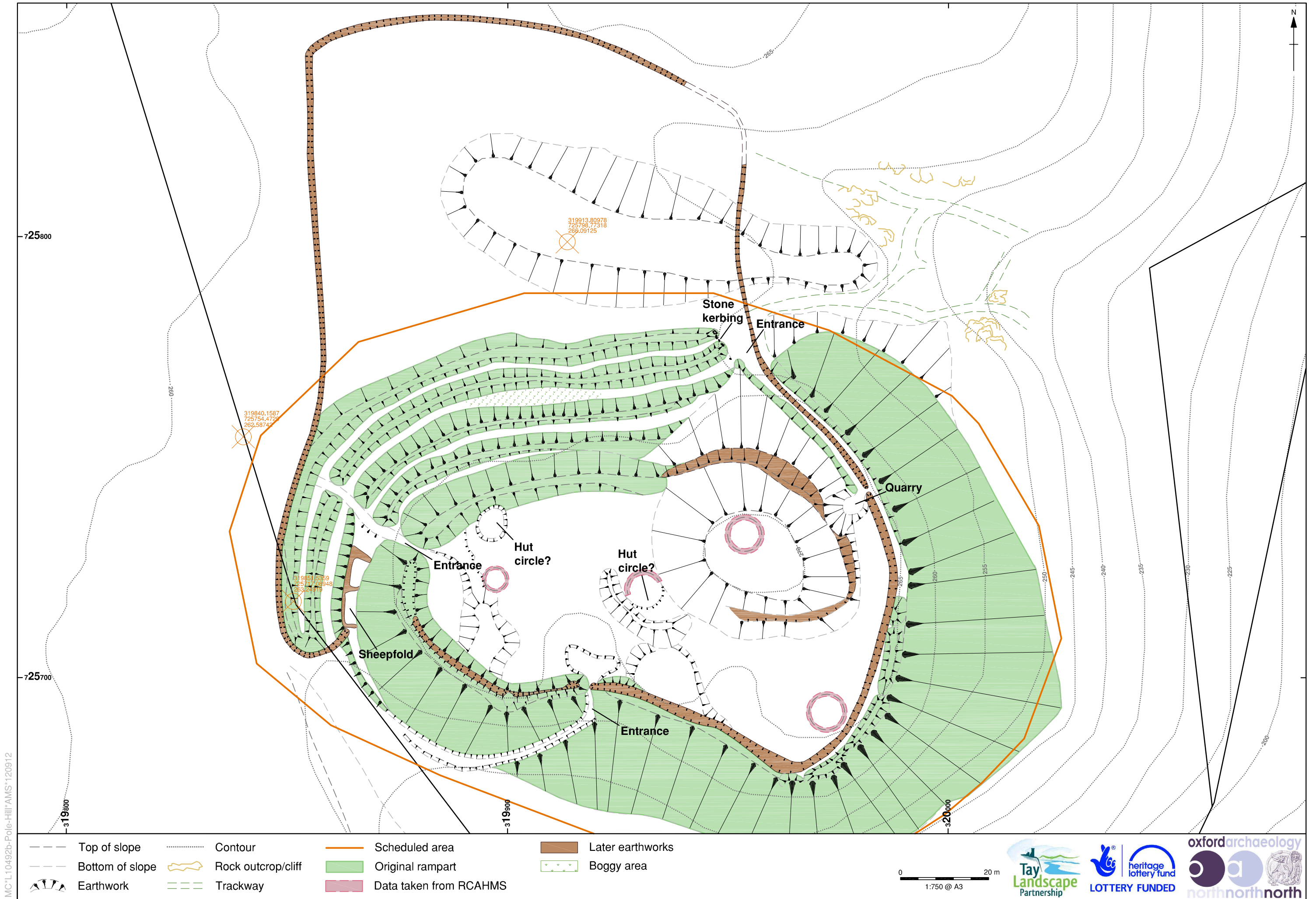
---	Top of slope	.....	Contour	---	Scheduled area	█	Data taken from RCAHMS	█	Pink granite boulder	█	Later earthworks
---	Bottom of slope	---	Rock outcrop/cliff	█	Original rampart	█	Modern cairn	█	Standing stone	█	Recumbent stone
▲	Earthwork	---	Trackway	█	Original rampart (assumed)	█	Boggy area				

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LOTTERY FUNDED  
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Figure 4: Law Hill Hillfort, Arnbathie - south detail





MC\*L10492b-Pole-Hill\*AMS\*120912

Figure 5: Pole Hill Hillfort, Evelick