





The Galloway Picts Project

Post-Excavation Research Design





# The Galloway Picts Project

# **Post-Excavation Research Design**

On behalf of:	The Dumfriesshire and Galloway Natural History and Antiquarian Society
NGR:	NX 5889 5601
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The Mouswald Trust | The Hunter Archaeological Trust | The Strathmartine Trust Sandeman Award | Gatehouse Development Initiative | John Younger Trust



# Contents

Introduction	4
Post-excavation Strategy	4
Research questions	4
Specialist Analyses & Reporting	6
Radiocarbon dating	6
Analysis of Pictish Inscription	7
Analysis of Ceramics	7
Analysis of Metalwork and Metalworking Debris	8
Analysis of Glass	9
Analysis of Worked Stone	9
Analysis of Lithics	10
Analysis of Faunal Bones	10
Archaeobotanical Analysis of the environmental remains	11
Analysis of Soil Micromorphology	11
Report Integration	12
Documentary Research	12
Report Illustrations	12
Publication	13
Archiving and Finds Disposal	13
Timetable	13
Appendices	15
Appendix 1: References	15
Appendix 2: Staff	15
Appendix 3: Research Hypotheses	15

# Tables

Table 1: Radiocarbon Dates	6
Table 2: Timetable	13



## Introduction

1.1 This Post-Excavation Research Design (PERD) sets out the programme of specialist analysis, publication and final archiving of the results of the Galloway Picts Project archaeological excavation of Trusty's Hill undertaken by the Dumfriesshire and Galloway Natural History and Antiquarian Society in 2012.

### **Post-excavation Strategy**

- 2.1 Following completion of the excavation (Stage 1), the post-excavation works comprise the final stage of archaeological investigations for the Trusty's Hill excavation:
  - Stage 2 specialist analyses, production of publication report, archiving of records and finds disposal.
- 2.2 The objective of the overall post-excavation strategy is to extract the full extent of information relating to the archaeological features and finds, as presented within the excavation Data Structure Report (Toolis & Bowles 2012), and to publish the results and so therefore create a permanent record within the public domain of the archaeology excavated through the Galloway Picts Project.
- 2.3 The archaeological fieldwork undertaken for the Galloway Picts Project comprised a topographic GPS survey to establish a modern plan and 3D model of the entirety of Trusty's Hill; the reexcavation of previous excavation trenches and limited sample excavation in order to recover and record environmental and artefactual evidence from secure archaeological contexts; and a detailed laser scan survey of the Pictish inscribed stone.
- 2.4 Four of the previous seven trenches were re-excavated. Trench 2 revealed a deep rock-cut basin on one side of the entrance to the hillfort, opposite the Pictish Inscribed Stone. This feature contained waterlogged deposits from which wood and other organic material was recovered for archaeobotanical analysis. Trench 4, on the east side of the interior summit of the site, encountered part of the vitrified rampart and associated dark soil deposits across an area of the interior. Excavation of these deposits recovered numerous animal bones, charcoal, worked stones and lithics, metalwork, metalworking debris and a rim sherd of 6th/7th century E-Ware. Trench 5 on the west side of the interior summit of Trusty's Hill, also encountered part of the vitrified rampart along with associated dark soil deposits also containing numerous animal bones, charcoal, worked stone and lithics, metalwork, metalworking debris, an Iron Age glass bead fragment and a rim sherd of 1st/2nd century Samian Ware. Trench 6 revealed the sterile fill of the rock-cut ditch on the north side of the site.

#### **Research questions**

- 3.1 The Scottish Archaeological Research Framework (ScARF) has identified a number of key medieval research issues relevant to the archaeological remains revealed at Trusty's Hill.
  - From North Britain to the idea of Scotland: Tribes, Kingdoms, States? Investigating the formation of polities will require considerable amounts of data to be gathered and integrated, and considerable advances can be made. This will hinge on understanding and questioning the relationships between centres of consumption, royal, ecclesiastical and urban and their hinterlands and the recognition that integrated economic activity underpins social identities and trajectories. Active critique of the concepts of progress and chronological development underpinning these trajectories on a national scale should be encouraged.
  - From North Britain to the idea of Scotland: Tribes, Kingdoms, States? Examining other regional foci and considering how and why they rise and fall should be promoted. The development of regional frameworks investigating other areas is to be endorsed in order to develop a more rounded picture of the trajectory of power across Scotland. Studies



into the nature of the interaction between polities, and how this is materially manifested, should be encouraged.

- *Mentalities: Identity, Ethnicity, Gender and Spirituality* Knowledge of the prehistoric period is fundamental to the protohistoric period: these must be studied together. Early historic or early medieval projects must, in addition, have a strong prehistoric programme.
- Parameters: Material Histories and Textual Archaeologies Collaborative approaches should be encouraged, both within archaeology, and with those working in other disciplines including history and the environmental sciences. The discipline needs to consider how it can best release the research potential of information from all sectors and address gaps in knowledge
- 3.2 Appendix 3 presents an overview of identified research issues specific to this programme of postexcavation analyses for Trusty's Hill. The main questions to be addressed can be summarised as follows:
  - Are the Pictish carvings genuine?
  - How was the Pictish inscription made?
  - What meaning/significance can be attributed to the Pictish inscription in relation to its archaeological context?
  - When did occupation of Trusty's Hill begin and end?
  - Is there evidence to support Thomas' sequence of a multi-phased settlement?
  - Is there any evidence, and if so, what is the nature and form of that evidence, to support contemporary occupation of Trusty's Hill to the presumed date of the Pictish symbols (ie fifth-seventh centuries AD)?
  - Is there any specific evidence for cultural activity by the occupants of Trusty's Hill and what is the form and nature of that evidence?
  - Is there any uncontaminated environmental evidence from the rock-cut basin relevant to the occupation of the site? If so, what does this evidence demonstrate about the economic and environmental resources of the occupants?
  - How does the form of the occupation evidence relate to later prehistoric/early historic settlements in south-west Scotland, specifically the duration of occupation, the material culture of occupation, ritual practices and the nature of abandonment?
  - How does the evidence from Trusty's Hill compare with specific local contemporary high status settlements such as the Mote of Mark, Tynron Doon, Buiston Crannog and Whithorn? Were these sites occupied at the same time? Is there any evidence of comparable access to high status goods and if not is there any evidence for why not? Were the ramparts at Mote of Mark and Trusty's Hill vitrified at closely comparable dates?
  - How does the evidence from Trusty's Hill compare and contrast with contemporary high status sites further away, such as Dunadd, Dumbarton Rock and Edinburgh Castle Rock, in terms of form and structure of settlement, material culture, date and duration of occupation, and nature of abandonment? Can comparable and contrasting patterns of settlement be identified?
- 3.3 The evidence from the excavation will provide a body of information against which other excavated material from sites in south-west Scotland and further afield can be compared and contrasted.



## **Specialist Analyses & Reporting**

#### **Radiocarbon dating**

4.1 AMS radiocarbon dates were obtained from eight separate pieces of charcoal and one single fragment of waterlogged wood from a variety of secure contexts from Trusty's Hill (Table 1). A further sample of sooting from under the rim on the exterior of the E ware sherd (SF 114) was also submitted for radiocarbon dating, to provide a date for the E ware vessel independently of the context, but the sample taken, which represented the entirety of sooting from under the exterior of the rim of the E ware sherd, failed to provide sufficient carbon for an AMS measurement.

Lab code	Context	Feature	Species	Years BP	d <sup>13</sup> C (‰)	Calibrated 1 sigma	Calibrated 2 sigma
SUERC-41590	2007	Primary fill of rock- cut basin	Corylus (Waterlogged wood)	1300 ± 30	-29.4‰	AD 668-767	AD 661 -773
SUERC-41591	4002	Backfill deposit	Corylus (Charcoal)	1465 ± 30	-25.7‰	AD 574-632	AD 551-646
SUERC-41592	4007	Dark soil deposit	Corylus (Charcoal)	1485 ± 30	-25.1‰	AD 551-610	AD 536-646
SUERC-41596	4008	Occupation deposit	Corylus (Charcoal)	1590 ± 30	-25.4‰	AD 426-533	AD 411-543
SUERC-41597	4016	Construction deposit	Corylus (Charcoal)	1510 ± 30	-27.2‰	AD 539-600	AD 529-623
SUERC-41598	5014	Dark soil deposit	Corylus (Charcoal)	1495 ± 30	-27.0‰	AD 547-602	AD 533-643
SUERC-41599	5017	Construction deposit	Corylus (Charcoal)	2345 ± 30	-26.2‰	415-383 BC	513-378 BC
SUERC-41600	5018	Rampart	Corylus (Charcoal)	1485 ± 30	-27.6‰	AD 551-610	AD 536-646
SUERC-41601	5022	Post-hole fill	Alnus (Charcoal)	2350 ± 30	-26.6‰	416-386 BC	515-381 BC

#### Table 1: Radiocarbon Dates

- 4.2 A calibrated radiocarbon date of AD 536-646 was recovered from the dark soil deposit (4007) in Trench 4 that abutted the vitrified rampart along the east side of the summit of the fort, which was matched by a date of AD 533-643 from dark soil deposit (5014) in Trench 5 that abutted the rampart on the western side of the fort summit. Calibrated dates from construction layers (4016 & 5017) beneath the summit rampart included 529-623 AD from the east side and 513-378 BC from the west side. Another Iron Age date of 515-381 BC was recovered from the base of a structural post-hole (5022) within the rampart at the west side though a lens of material (5018) from the core of the rampart above this yielded a date of AD 536-646. One of the earliest stratigraphic occupation deposits (4008) in the corner of Trench 4 provided a radiocarbon date of AD 411-543, while the backfill soil (4002) from Charles Thomas' excavation of Trench 4 yielded a date of AD 551-646. A piece of wood taken from the waterlogged primary fill of the rock-cut basin at the opposite side of the entranceway to the Pictish carvings was radiocarbon date to AD 661-773.
- 4.3 The radiocarbon dating indicates initial occupation of Trusty's Hill around 400 BC. However, it is unlikely that the summit rampart originates to this time, as an early sixth-early seventh century AD date was obtained from the construction layer beneath the rampart on the east side and another early sixth mid seventh century AD date was taken from the vitrified rampart itself on the west side. Rather, it is more likely that the Iron Age material, such as the radiocarbon dated charcoal and glass bead fragment found within the foundation trench of the vitrified rampart on the west side, is residual, probably having been swept up from the interior of the site and laid out as a bed of material for the timber structure and stone core of the rampart. The Iron Age occupation of Trusty's Hill appears to have been followed by a hiatus before the hill was re-occupied in the early fifth to early sixth century AD and fortified with a timber-laced

rampart around its summit between the early sixth and mid seventh century AD. This rampart was destroyed probably around the end of this period in the early-mid seventh century AD. Furthermore, the date of AD 661-773 taken from the primary fill of the rock-cut basin opposite the Pictish Inscribed Stone demonstrates that the basin derives from at least the last phase of occupation and that use of this feature may have continued after the destruction of the fort.

4.4 Bayesian analysis of the radiocarbon dates pertaining to the fifth-mid seventh centuries AD will be undertaken in order to attempt to refine the date range of occupation to a shorter range. These dates are SUERC-41591, SUERC-41592, SUERC-41596, SUERC-41597, SUERC-41598 and SUERC-41600. The principal question Bayesian analysis will address is: can occupation during the early medieval period be refined to specific decades within the fifth to mid seventh centuries AD?

#### Analysis of Pictish Inscription

- 5.1 Several observations can be made following the cleaning of the inscribed stone and the laser scan survey. First and foremost, no ogham was apparent along the southern edge of the inscribed stone. Nor was the cup-mark above the 'sea-beast' apparent. This must cast doubt upon the credibility of the previous laser scan survey. However, it should be noted that the 2012 laser scan confirms that the z-rod and double disc symbol do not interweave as previously depicted, but intercut each other across the lower bar of the double disc. Furthermore, the horned head clearly cuts one of the inscribed signatures, demonstrating that the horned head is not ancient, but rather another element of the nineteenth century graffiti only too evident across the carved stone.
- 5.2 The analysis will therefore seek to:
  - establish if the Pictish carvings are genuine;
  - determine how the Pictish inscription was made;
  - discuss the meaning/significance can be attributed to the Pictish inscription in relation to its archaeological context;
  - undertake a comparative review of Pictish inscriptions with that from similarly dated sites in Scotland, focussing specifically on Dunadd and Edinburgh Castle Rock;
  - produce a specialist report suitable for inclusion in the publication report.

#### **Analysis of Ceramics**

- 6.1 There were two fragments of pottery recovered during the excavation, both imported to Britain. Recovered from deposit 5014 in Trench 5, SF 32 is a rim of a Roman samian vessel of form Dr 37, of Gaulish manufacture and late 1st or 2nd second century AD date. Recovered from deposit 4007 in Trench 4, SF 114 is the rim of a small E ware jar, imported from western France in the late 6th or 7th centuries AD, and used to import luxuries such as spices, exotic foods and dyestuffs. Both are significant finds and require full specialist analysis. The samian sherd has been rubbed down on one edge, a common practice on native sites, and sometimes associated with metalworking often at periods later than the Roman period.
- 6.2 E ware is associated with high status, often royal, sites in Atlantic Britain such as Dunadd, Dumbarton Rock and Whithorn. Coastal fortified sites such as Trusty's Hill often acted as importation centres for E ware and other luxury goods, which were then distributed to client sites in the region.
- 6.3 A variety of ceramic evidence for fine metalworking was recovered from the excavation, including moulds, crucibles, heating trays, furnace lining and a possible crucible stand. In addition there was evidence of iron working in the form of hearth bottoms. The crucibles show a wide range of sizes, but all appear to be of unlidded types similar to those from the Mote of Mark. One



has thick red enamel deposits which may have resulted from glass melting, though this could also be from copper. Other deposits may indicate silver working. The presence of gold and silver in metalworking is characteristic of royal sites in the Atlantic West. This material needs full specialist analysis as it is key to understanding the status of the site and the activities of the inhabitants. Two of the mould fragments (SF 192 & 279), both recovered from deposit 4007, seem to be from radiating groups of pins similar to those from Mote of Mark, Dunadd and the Brough of Birsay. The third mould fragment (SF 174), also from deposit 4007, is of a complex item which cannot yet be identified. The range of evidence from only a small excavation suggests that Trusty's Hill was an important metalworking site with access to significant resources and craftworkers.

- 6.4 The analysis of ceramic artefacts will seek to:
  - produce a full catalogue of ceramic sherds;
  - determine the fabric, type, form, function, origin, manufacture and date of the ceramic vessels;
  - undertake lipid analysis of the E-Ware sherd in order to determine the contents of the E-Ware vessel;
  - undertake XRF analysis of the crucible fragments in order to determine the metals being processed ;
  - identify specific ceramic artefacts for small finds photography;
  - identify specific ceramic artefacts for small finds illustration;
  - undertake a comparative review of the ceramic artefact data with that from similarly dated sites, focussing specifically on local high status settlements in SW Scotland such as Mote of Mark, Buiston Crannog and Whithorn, and from high status settlements further afield such as Dunadd, Edinburgh Castle Rock, Dumbarton Rock, Bamburgh Castle and other relevant Roman/British Iron Age sites;
  - produce a specialist report suitable for inclusion in the publication report.

#### Analysis of Metalwork and Metalworking Debris

- 7.1 Nine separate metal artefacts as well as numerous fragments of slag, iron pyrites and hammerscale were recovered during the excavation, all from Trenches 4 and 5. The copper alloy and iron roundel SF023 from deposit 4002 in Trench 4 has a central setting and concentric decoration with possible interlace on the outer border. It has some similarities to material being produced at the Mote of Mark. The iron tool SF 026 from deposit 5007 in Trench 5 is a 'slotted and pointed object' characteristic of early medieval sites and probably associated with leather working. There were also a number of iron pins and nails recovered as well as a lead strip and a fragment of tinfoil (probable modern contamination).
- 7.2 One of the main objectives of the metalworking analysis will be to co-ordinate with the ceramics analysis to confirm the range of metalworking processes which were taking place (e.g. smelting/ refining/ smithing) as well as the nature of the metals being produced (e.g. non-ferrous alloys/ iron/ phosphoric iron/ steel) as this is not always possible from purely visual analysis; the XRF analysis of the non-ferrous metalworking debris will tie in with this objective. This, along with contextual analysis, will allow a better understanding of the skills of the metalworkers and the range of raw materials they were exploiting, adding to the understanding of the nature and importance of the site and how it relates to other contemporary metalworking sites.
- 7.3 The analysis of metalwork and metalworking debris will seek to:
  - produce a full catalogue of metal artefacts;



- determine the fabric, type, form, function, origin, manufacture and date of the metal artefacts, slag and hammerscale;
- undertake lead isotope analysis of lead strip;
- undertake x-rays of selected metal artefacts;
- undertake cleaning and conservation of metal artefacts;
- identify specific metal artefacts for small finds photography;
- identify specific metal artefacts for small finds illustration;
- undertake a comparative review of the metalwork and metalworking artefact data with that from similarly dated sites, focussing specifically from local high status settlements in SW Scotland such as Mote of Mark, Tynron Doon, Buiston Crannog and Whithorn, and from high status settlements further afield such as Dunadd, Edinburgh Castle Rock, Dumbarton Rock and other relevant Iron Age sites;
- produce a specialist report suitable for inclusion in the publication report.

## **Analysis of Glass**

- 8.1 Five separate glass fragments were recovered during the excavation, all from Trenches 4 and 5. Half of an annular wound bead of opaque yellow glass (SF 197) was recovered from the construction deposit 5017 within Trench 5. This may be an Iron Age (Guido Class 8) as post-Roman opaque yellow beads are more globular. Two of the other fragments may be grains of red garnet, while another fragment resembles a piece of a millefiore setting but may instead be natural crystal. The fourth fragment appears to be modern glass.
  - The analysis of glass will seek to:
  - produce a full catalogue of glass artefacts;
  - determine the fabric, type, form, function, origin, manufacture and date of the glass;
  - identify specific glass artefacts for small finds photography;
  - identify specific glass artefacts for small finds illustration;
  - undertake a comparative review of the glass artefact data with that from similarly dated sites, focussing specifically from local high status settlements in SW Scotland such as Mote of Mark, Tynron Doon, Castlehaven, Buiston Crannog and Whithorn, and from high status settlements further afield such as Dunadd, Edinburgh Castle Rock, Dumbarton Rock and other Iron Age sites in Dumfries and Galloway;
  - produce a specialist report suitable for inclusion in the publication report.

#### Analysis of Worked Stone

- 9.1 Nine separate worked stone artefacts as well as numerous possible sling stones were recovered during the excavation, all from Trenches 2, 4 and 5. The worked stones include a spindle whorl (SF 035) made of quartzite from deposit 5014 in Trench 5, four possible whetstones, a possible decorated pebble (SF 019), a stone rubber, a worked stone and a pecked masonry block. The sling stones were recovered predominantly from Trench 4, where they were concentrated around two locations.
- 9.2 The analysis of worked stone will seek to:
  - produce a full catalogue of worked stone artefacts;



- determine the fabric, type, form, function, origin, manufacture and date of the stone artefacts;
- identify specific worked stone artefacts for small finds photography;
- identify specific worked stone artefacts for small finds illustration;
- undertake a comparative review of the worked stone artefact data with that from similarly dated sites, focussing specifically from local high status settlements in SW Scotland such as Mote of Mark, Tynron Doon, Buiston Crannog and Whithorn, and from high status settlements further afield such as Dunadd, Edinburgh Castle Rock, Dumbarton Rock and other sites;
- produce a specialist report suitable for inclusion in the publication report.

## **Analysis of Lithics**

- 10.1 Sixteen lithic artefacts were recovered from Trenches 4 and 5. These artefacts appear to be comprised of flint, chert and quartz flakes, cores and pebbles.
- 10.2 The analysis will seek to:
  - produce a full catalogue of lithic artefacts;
  - determine the fabric, type, form, function, origin, manufacture and date of the lithic artefacts;
  - identify specific lithic artefacts for small finds illustration;
  - undertake a comparative review of the lithic artefact data with that from similarly dated sites, focussing specifically from local high status settlements in SW Scotland such as Mote of Mark, Tynron Doon, Buiston Crannog and Whithorn, and from high status settlements further afield such as Dunadd, Edinburgh Castle Rock, Dumbarton Rock and other Iron Age sites in Dumfries and Galloway;
  - produce a specialist report for the general publication report.

#### Analysis of Faunal Bones

- 11.1 A moderate quantity of animal bones was recovered from backfill, destruction, occupation and construction deposits within Trenches 4 and 5, in the interior summit of Trusty's Hill. The post-excavation analysis of this assemblage will provide information regarding the species, demographic and pathological data of the animals represented in the remains.
- 11.2 The analysis will therefore seek to:
  - establish the variety and relative populations of species represented by the remains;
  - determine the age at death and sex of the individual animals, where preservation allows;
  - determine evidence of butchery and establish butchery patterns
  - identify any pathological conditions present to assess the health status of the animals;
  - identify and record any non-metric traits;
  - draw comparisons with the faunal assemblage from local high status settlements in SW Scotland such as Mote of Mark, Tynron Doon, Buiston Crannog and Whithorn, and from high status settlements further afield such as Dunadd, Edinburgh Castle Rock, Dinas Powys and other sites;

11



• produce a specialist report suitable for inclusion in the publication report.

#### Archaeobotanical Analysis of the environmental remains

- 12.1 As part of the assessment undertaken during the preparation of the data structure report, 44 bulk samples, representing a range of archaeological features, were floated, dried and made ready for archaeobotanical analysis. A further 43 single spot finds of charcoal and unburnt waterlogged wood were also made ready for archaeobotanical analysis. A selection of 9 samples were assessed to identify single entities for AMS radiocarbon dating.
- 12.2 It is proposed that four of the waterlogged soil samples be processed by a specialist, and together with the unburnt waterlogged wood and charcoal from secure contexts within Trusty's Hill (excluding topsoil, backfill and natural subsoil deposits), analysed by the project archaeobotanist with the aim of identifying evidence for the environment of Trusty's Hill Fort.
- 12.3 It is recommended that the wooden artefacts are carefully cleaned, photographed with written descriptions and identified to species to confirm their likely date.
- 12.4 The analysis of archaeobotanical remains will seek to:
  - identify the range of plant species recovered from the processed soil samples;
  - determine the environmental context for the occupation of Trusty's Hill;
  - identify any environmental evidence related to the specific occupation of the summit of Trusty's Hill;
  - identify any environmental evidence related to the specific use of the rock-cut basin in Trench 2;
  - identify the wood species and evidence for anthropogenic activity (eg axe/saw cut marks, etc) from the rock-cut basin in Trench 2;
  - draw comparisons with archaeobotanical assemblages from local high status settlements in SW Scotland such as Mote of Mark, Tynron Doon, Buiston Crannog and Whithorn, and from high status settlements further afield such as Dunadd, Edinburgh Castle Rock and other sites;
  - produce a specialist report suitable for inclusion in the publication report.

#### Analysis of Soil Micromorphology

- 13.1 A soil sample (Sample 50) was taken with a monolith tin from the Trench 6 section through the interface between the ditch fill (6002) and the underlying bedrock (6004) of the northern rock-cut ditch, but owing to its stony content, it was not possible to extract a kubiena tin from this in the laboratory. However, two kubiena samples were taken from 'dark soil' deposits within the summit interior of Trusty's Hill, one (Sample 51) from the trench section through destruction deposit 4003 and dark soil deposit 4007 in Trench 4 and another (Sample 52) from the trench section through construction deposit 5017 in Trench 5. The purpose of this analysis will be to determine the process of how these layers formed, ie were they dumped in one event, or did they accumulate through natural processes, or a series of dumping or some other form of accumulation. This may help to explain the context for the finds, ie were they dropped where they were found or were they perhaps collected from elsewhere on the site and then dumped where they were found.
- 13.2 The analysis of soil micromorphology remains will seek to:
  - produce a full description of the soil samples taken;
  - determine the process of deposition for each separate soil sampled;



- undertake a comparative review of 'dark soil' data with that from similarly dated sites, focussing specifically from high status early medieval settlements in Britain such as Dunadd;
- produce a specialist report for the general publication report.

#### **Report Integration**

14.1 Once the specialist reports have been completed this crucial stage will integrate the specialist reports with the background and field results presented within the Data Structure Report to produce the results text for the publication report.

#### **Documentary Research**

- 15.1 As part of the reporting process it will be necessary to review information from the excavations and surveys of contemporary sites and the historical record of 5th-7th century AD northern Britain. This will focus on local high status settlements in south-west Scotland, specifically:
  - Mote of Mark;
  - Tynron Doon;
  - Buiston Crannog;
  - Castlehaven;
  - Whithorn.
- 15.2 This research will also focus on high status settlements further afield such as:
  - Dunadd;
  - Edinburgh Castle Rock;
  - Dumbarton Rock;
  - Burghead;
  - Dundurn;
  - Bamburgh Castle;
  - Dinas Powys;
  - Cadbury Congresbury.
- 15.3 This research may also include other Iron Age sites in Dumfries and Galloway and south-west Scotland. This documentary research would be most usefully undertaken after the majority of the specialist analyses have been completed and issues of comparison and contrast can be drawn.

#### **Report Illustrations**

16.1 Many of the field illustrations have already been prepared to publication standards for the Data Structure Report. However, illustrations and photography of key artefacts and features will be required to supplement this as the post-excavation process progresses. In addition, distribution maps and comparative plans of contemporary sites will be required. The illustrations produced in this stage will be for the publication report and will comply with publication standards.



# Publication

17.1 The aim of this post-excavation research design is to bring the artefacts and results of the Galloway Picts Project to the public domain through publication. The results of the stages described above will culminate in a report suitable for publication. The publication will incorporate the information recovered from the site and the specialist studies of the artefacts. It will also include a comparative overview of the features and deposits to place the site within its local, regional and national setting. It is proposed that the Dumfriesshire and Galloway Natural History and Antiquarian Society will publish the report as a monograph or book, with shorter summary articles submitted for publication in popular magazines such as History Scotland, Current Archaeology and British Archaeology. Specific summary results of the various stages of the post-excavation works will also be made available online through the Galloway Picts Project Website. A leaflet guiding visitors to and around Trusty's Hill will also be produced for distribution from local outlets.

## **Archiving and Finds Disposal**

- 18.1 Upon completion of the final report and its publication, the site record and small finds will be archived. The fieldwork records will be submitted to the archive of the National Monuments Record according to currently prescribed standards.
- 18.2 The arrangement for the final disposal of any finds made in connection with the archaeological work, will be deposited in keeping with Scottish legal requirements as set out in the Treasure Trove Code of Practice published by the Scottish Government in December 2008. The laws relating to Treasure Trove and Bona Vacantia in Scotland apply to all finds where the original owner cannot be identified. This includes all material recovered during archaeological fieldwork. Accordingly, all assemblages recovered from archaeological fieldwork are claimed automatically by the Crown and must be reported to the Scottish Archaeological Finds Allocation Panel through its secretariat, the Treasure Trove Unit. In the event of the discovery of small finds, a filled-out copy of the form "Declaration of an Archaeological Assemblage from Fieldwork" and two copies of the pertinent report will be submitted to the Panel at the conclusion of the post-excavation work. The Panel will then be responsible for recommending to the Queen's and Lord Treasurer's Remembrancer which museum should be allocated the finds. All artefacts will be temporarily stored by GUARD Archaeology until a decision has been made by the panel.

## Timetable

19.1 The timetable (Table 2) is outlined below and will be implemented accordingly.

Table 2: Timetable

Works	Completion
Radiocarbon dating	September 2012
Faunal Bone Analysis	December 2012
Soil Micromorphology Analysis	December 2012
Worked Stone Analysis	December 2012
Lithics Analysis	December 2012
Pictish Inscription Analysis	January 2013
Archaeobotanical Analysis (Phase 1 - initial 20 spot finds and bulk samples, uncarbonised wood and 4 waterlogged samples)	February 2013
Metalwork Analysis (Phase 1 - catalogues, x-rays, lead isotope, conservation)	March 2013
Glass Analysis	March 2013
Archaeobotanical Analysis (Phase 2 - remaining samples and spot finds)	May 2013
Metalwork Analysis (Phase 2 - slag, XRF, small finds photography)	June 2013
Ceramics Analysis	June 2013
Report Integration	July 2013
Documentary Research	July 2013
Illustrations	July 2013
Publication submission	August 2013
Archiving and Finds Disposal	August 2013



The Galloway Picts Project Post-Excavation Research Design Section 2: Appendices



www.gallowaypicts.com



# Appendices

#### **Appendix 1: References**

Toolis, R & Bowles, C 2012 *The Galloway Picts Project: Excavation and Survey of Trusty's Hill, Gatehouse of Fleet*, unpublished Data Structure Report.

#### Appendix 2: Staff

The following people will undertake specialist post-excavation work for this project.

Ronan Toolis	Post Excavation Management & Reporting
Chris Bowles	Reporting
Aileen Maule	Find Co-ordination, Archiving & Finds Disposal
Gillian McSwan	Illustrations
Karen Deighton	Faunal Bone Analysis
Beverley Ballin Smith	Worked Stone Analysis
Torben Ballin	Lithic Analysis
Susan Ramsay	Archaeobotanical Analysis
Ewan Campbell	Ceramics Analysis
Fraser Hunter & Gemma Cruickshanks	Metalwork, Metalworking and Glass Analysis
Will Murray	Metalwork Cleaning and Conservation
Laura Hamlet	Soil Micromorphology Analysis
Katherine Forsyth	Pictish Inscription Analysis

#### **Appendix 3: Research Hypotheses**

The following list of research hypotheses and issues provides an overview of the range and type of research questions that have arisen from the excavation results.

	Hypothesis based upon excavation data prior to post-excavation programme	Issues
Feature	Chronology	
Hillfort	The hillfort was originally occupied c. 400 BC and then re-occupied during the 5th- mid 7th centuries AD.	Can Bayesian analysis refine the date of early medieval occupation to specific decades within the fifth to mid seventh centuries AD?
		Can analysis of the archaeobotanic and faunal remains determine any distinction between the environment and economy of the Iron Age occupation of the site (principally contained within deposit 5017) and the early medieval occupation of the site (principally deposits 5014, 4007, 4011-4013, 4008, 4020)?



	Hypothesis based upon excavation data prior to post-excavation programme	Issues
Feature	Chronology	
Dark soil denosits	The principal excavated dark soil deposits of the hillfort date to sometime in the 5th-mid 7th centuries AD.	Can soil micromorphology analysis determine how long the dark soil deposits (4007 & 5017) took to form?
associated with vitrified ramparts around	The dark soil deposit 4007 was formed by a a short process of accumulation culminating in the burning of the rampart.	What was the process of deposition for dark soil deposit 4007?
summit	The construction deposit 5017 was formed in one short event through dumping.	What was the process of deposition for construction deposit 5017?
Primary fill of rock- cut basin	The rock-cut basin remained in use after the destruction of the hillfort.	Can analysis of the archaeobotanic remains determine the process of deposition of environmental remains and illuminate the nature of the use of the rock-cut basin?
Feature	Function	
Hillfort	Trusty's Hill was likely originally an Iron Age hillfort, reoccupied in the 5th-7th centuries AD when it developed into a nuclear fort.	<ul> <li>How does the form of the occupation evidence relate to later prehistoric/early medieval settlements in Scotland, particularly south-west Scotland, specifically the duration of occupation, the material culture of occupation, elements of continuity/change and the nature of abandonment?</li> <li>Can any comparisons be made to other prehistoric settlements similarly reoccupied in the early historic period? If so, what conclusions about early historic elite society can be drawn?</li> <li>How does the evidence from Trusty's Hill compare with specific local contemporary high status settlements such as the Mote of Mark, Tynron Doon, Buiston Crannog and Whithorn?</li> <li>Were these sites occupied at the same time?</li> <li>Is there any evidence of comparable access to high status goods and if not is there any evidence for why not?</li> <li>Were the ramparts at Mote of Mark and Trusty's Hill vitrified at closely comparable dates?</li> <li>How does the evidence from Trusty's Hill compare and contrast with contemporary high status sites further away, such as Dunadd, Dumbarton Rock and Edinburgh Castle Rock, in terms of form and structure of settlement, material culture, date and duration of occupation, and nature of abandonment?</li> </ul>
Vitrified rampart	The vitrification of the timber-laced stone rampart was a deliberate act of destruction around the middle of the seventh century AD.	Can a full sequence of construction, use and destruction be gained from the available evidence? If so, are there parallels for the evidence revealed at Trusty's Hill in other vitrified forts in Scotland?
Pictish inscription	The Pictish inscription is genuine and relates to the occupation of the hillfort during the 5th-7th centuries AD.	How was the Pictish inscription made and are there parallels /comparisons for this evidence from other Pictish inscriptions in Scotland? What meaning/significance can be attributed to the Pictish inscription in relation to its archaeological
		Are there parallels for this in other sites in Scotland?



Artefact class	Attributes	
Ceramics	The single sherd of Samian Ware dates to the 1st/2nd century AD but was retained and re-used after this for some kind of industrial use, before being	What was the original function and status of the Samian vessel?
	discarded during the 5th-7th centuries AD.	What are the origins of the Samian vessel?
		Are there identical types of this specific Samian vessel in other native contexts in Dumfries & Galloway?
		Are there identical types of this specific Samian vessel in other native contexts further afield in Scotland?
		What was the status of this Samian vessel within a native context in Scotland during the 1st/2nd century AD?
		Are there identical types of this specific Samian vessel in other native contexts in Dumfries & Galloway and further afield in Scotland during the 5th-7th centuries AD?
		What was the status/function/meaning of this Samian vessel within a context in Scotland during the 5th-7th centuries AD?
		What cultural, economic, social and political attributes can be inferred from the presence of Samian ware at Trusty's Hill?
	The single sherd of E-ware dates to the late sixth or early seventh centuries AD.	What was the original function and status of the E-ware vessel?
		What are the origins of the E-ware vessel?
		Are there identical types of this E-ware vessel in other 5th- 7th century AD contexts in SW Scotland?
		Are there identical types of this E-ware vessel in other 5th-7th century AD contexts further afield in Scotland and Atlantic Britain?
		Can lipid analysis determine what the E-ware vessel was used for?
		What cultural, economic, social and political attributes can be inferred from the presence of E-ware at Trusty's Hill?
		Can XRF analysis determine what metals were processed in the crucibles?
		Are there identical types of these industrial ceramics in other 5th-7th century AD contexts in SW Scotland?
	The moulds, crucibles, heating trays, furnace lining and a possible crucible stand represent evidence of fine	Are there identical types of these industrial ceramics in other 5th-7th century AD contexts further afield in Scotland and Atlantic Britain?
	metalworking at the site during the 5th-7th centuries AD.	What cultural, economic, social and political attributes can be inferred from these specific industrial ceramics?



Artefact class	Attributes	
		What can the x-rays of the metalwork reveal about the form and typology of the artefacts?
		What was the original function and status of each of the artefacts?
		What dates can be attributed to each of the artefacts?
	The metalwork comprises a range of personal high status jewellery (pins and	Can the cleaning and conservation of the artefacts reveal new features of the artefacts?
Metalwork	brooches), functional items (socketed tool, nail shank) and industrial debris (slag, hammerscale) from occupation of	Can the lead isotope analysis reveal the source of the lead used to make the lead artefact?
	Trusty's Hill during the 5th-7th centuries AD.	Are there identical/similar types of these artefacts in other 5th-7th century AD contexts in SW Scotland?
		Are there identical/similar types of these artefacts in other 5th-7th century AD contexts further afield in Scotland and Atlantic Britain?
		What cultural, economic, social, and political attributes can be inferred from the presence of these artefacts at Trusty's Hill?
	The glass derives from occupation of the hillfort during the 5th-7th centuries AD.	What are the origins, status and function of each of the glass artefacts in the assemblage from Trusty's Hill?
Glass		Are there identical/similar types of these artefacts in other Iron Age and 5th-7th century AD contexts in SW Scotland?
		Are there identical/similar types of these artefacts in other Iron Age and/or 5th-7th century AD contexts further afield in Scotland and Atlantic Britain?
		What cultural, economic, social, and political attributes can be inferred from the presence of these artefacts at Trusty's Hill?
Worked Stone The worke occupation o 5th-7		What are the origins, status and function of each of the worked stones in the assemblage from Trusty's Hill?
	The worked stones derive from occupation of the hillfort during the 5th-7th centuries AD.	Are there identical/similar types of these artefacts in other Iron Age or 5th-7th century AD contexts in SW Scotland?
		Are there identical/similar types of these artefacts in other Iron Age or 5th-7th century AD contexts further afield in Scotland and Atlantic Britain?
		What cultural, economic, social, and political attributes can be inferred from the presence of these artefacts at Trusty's Hill?
Lithics	The lithics derive from occupation of the hillfort during the 5th-7th centuries AD.	What are the origins, status and function of each of the lithics in the assemblage from Trusty's Hill?
		Are there identical/similar types of these artefacts in other Iron Age and 5th-7th century AD contexts in SW Scotland?
		Are there identical/similar types of these artefacts in other Iron Age and 5th-7th century AD contexts further afield in Scotland and Atlantic Britain?
		What cultural, economic, social, and political attributes can be inferred from the presence of these artefacts at Trusty's Hill?



Artefact class	Attributes	
		What is the range and relative populations of animal species recovered from the summit of Trusty's Hill?
		Can the age at death and sex of individual species be determined?
		What is the evidence of butchery practice and patterns in the faunal assemblage from Trusty's Hill?
		Can any pathological conditions be identified to assess the health status of the animals?
Franci Danas	The faunal bones derive principally es from occupation of the hillfort during the 5th-7th centuries AD.	What do these faunal remains reveal about the environmental, economic and social context for the occupation of Trusty's Hill?
Faunai Bones		Can analysis of the faunal remains determine any distinction between the environment and economy of the Iron Age occupation of the site (principally deposit 5017) and the early medieval occupation of the site (principally deposits 5014, 4007, 4011-4013, 4008, 4020)?
		Are there close comparisons /contrasts in other Iron Age and 5th-7th century AD faunal assemblages in SW Scotland?
		Are there close comparisons /contrasts in other Iron Age and 5th-7th century AD faunal assemblages further afield in Scotland and Atlantic Britain?
		What cultural, economic, social, and political attributes can be inferred from faunal assemblage from Trusty's Hill?
	The charred macroplants and waterlogged botanical remains derive ains principally from occupation of the hillfort during the 5th-7th centuries AD.	What is the range of plant species recovered from Trusty's Hill?
Botanical Remains		What do these remains reveal about the environmental, economic and social context for the occupation of the summit of Trusty's Hill?
		Is there any uncontaminated environmental evidence from the rock-cut basin relevant to the occupation of the site?
		Can the wood species and evidence for anthropogenic activity (eg axe/saw cut marks, etc) from the rock-cut basin in Trench 2 be identified?
		Can analysis of the archaeobotanical remains determine the process of deposition of environmental remains and illuminate the nature of the use of the rock-cut basin?
		What do the archaeobotanical remains reveal about the social context for the specific use of the rock-cut basin in Trench 2?
		Can analysis of the archaeobotanical remains determine any distinction between the environment and economy of the Iron Age occupation of the site (principally deposit 5017) and the early medieval occupation of the site (principally deposits 5014, 4007, 4011-4013, 4008, 4020)?
		Are there close comparisons /contrasts in other Iron Age and 5th-7th century AD charred macroplant and waterlogged botanical assemblages in SW Scotland?
		Are there close comparisons /contrasts in other Iron Age and 5th-7th century AD charred macroplant and waterlogged botanical assemblages further afield in Scotland and Atlantic Britain?
		What cultural, economic, social, and political attributes can be inferred from archaeobotanical assemblage from Trusty's Hill?

# The Galloway Picts Project



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