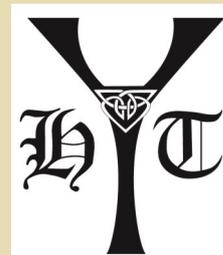
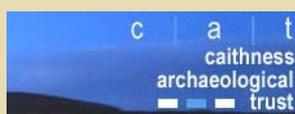


# Burn of Swartigill Iron Age Settlement



Project update: March 2022



# Setting the scene

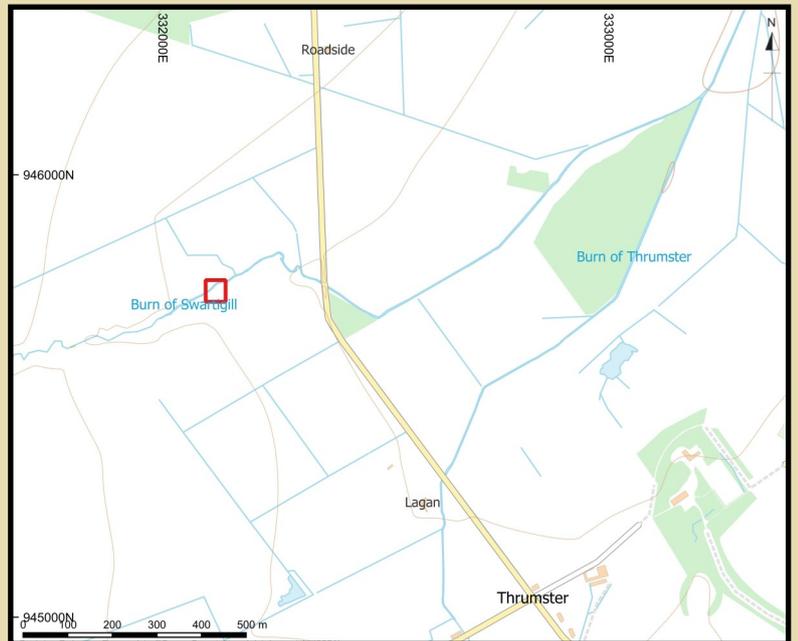
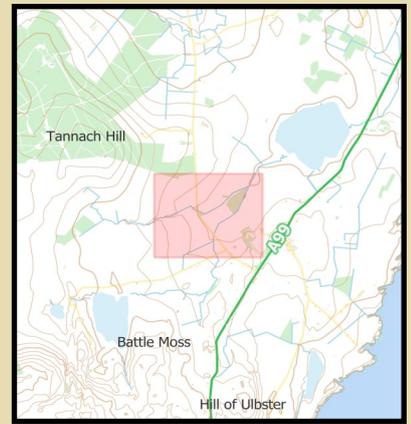
The Burn of Swartigill is set within a shallow meltwater channel that runs from east to west across the open moorland to the west of Thrumster, Caithness.

The Site is situated to the north of the Yarrows Archaeology Trail; a rich historic landscape, with sites dating as far back as 10000 years into the Mesolithic period.

Two broch sites are close to the site, at Thrumster 1.3km to the southeast and the Broch of Yarrows, 2.5km to the southeast. The Late Iron Age settlement site of Thrumster is located 1km upstream to the west.

Medieval farmsteads are located on the northern and southern edges of the meltwater channel 30m to the northwest of the site, and on the southern edge of the meltwater channel 160m to the southeast .

***Below: The Burn of Swartigill in its landscape setting, with the Loch of Yarrows in the distance. Photograph by Angus MacKay***



# Introduction

Archaeological excavations at the Burn of Swartigill form part of a community heritage initiative that has evolved from a small-scale archaeological investigation into a dynamic project with wide reaching objectives.

The ongoing project is a collaboration between the Yarrows Heritage Trust, the University of the Highlands and Islands Archaeology Institute and the Orkney Research Centre for Archaeology (ORCA).



***ORCA Geophysicist Linda Somerville and community volunteer Ian Giles undertaking***

The 2021 excavation was funded by Foundation Scotland and the Lybster and Tannach Non-formal learning fund.

The site was discovered after a period of very heavy rainfall, when the burn in spate began to expose structures along its banks. Sheep used the bank for shelter and began to expose the structures as they rubbed against the stone.

In 2012, members of the Yarrows Heritage Trust investigated the erosion and recorded the archaeological remains visible at that time. Prehistoric pottery was recovered; the first evidence that Iron Age structures were present at the site.



***The first trial trench excavated at the Site in 2015.***

A geophysical survey in 2014 showed evidence for archaeological activity within a wide area the south bank of the burn.

There have been five subsequent seasons of excavation at the Burn of Swartigill, revealing a remarkable prehistoric site.

It is the vision of the Yarrows Heritage Trust and the University of the Highlands and Islands Archaeology Institute to develop a project that will have wide reaching benefits.



***The burn of Swartigill has cut a swathe through the ancient settlement.***

# Project Objectives

The project aims to enhance our understanding of the unique archaeological heritage of Caithness and promote it to wider audience.

The excavation of the site will help raise the profile of Caithness as an archaeological heritage tourism destination. The long term presentation of the site will also build capacity in the tourism sector for the region. In order for this to happen, the site needs to be integrated into the local, regional and national cultural heritage networks.

The excavation provides a resource for training of community volunteers and student archaeologists. It is also a great environment for non-formal outdoor learning activities for primary and secondary school age children.



***ORCA Site Assistant Calum Hall demonstrating test pit excavation to UHI Archaeology Student Franceca Meneghetti.***

Training and knowledge transfer form the core principles upon which the project has been founded, and which we aim to continue. This is achieved through:

- Skill sharing between experienced archaeologists and volunteers.
- A formal University of the Highlands and Islands Archaeology Institute field school for teaching excavation skills.
- Activity days for local primary schools, with aspirations to develop class workshops and outdoor learning opportunities for secondary schools.



***ORCA Project Officer Bobby Friel advising Caithness Broch Project's Kenny McElroy on site survey and recording.***



***Professional Archaeologists Calum Hall and Holly Young working alongside community volunteers Islay MacLeod and Alison Smith.***

# Research Themes

Cultural heritage is a finite resource, and it is important that the investigation is undertaken within a robust research framework. The project draws upon research themes from the Scottish Archaeological Research Framework (ScARF), including:

- **Site development and Chronology.**
- **Economy, environment and impact of settlement.**
- **Power Status and Social Hierarchies in the Middle and Late Iron Age.**

The methodologies used to explore these themes include:

- Detailed recording during excavation to understanding phases of activity on the Site.
- Scientific dating methods, including Radiocarbon dating, to create a secure chronology for the phases of activity.
- Artefacts analysis to place the site within its wider cultural context.
- Study of the palaeoenvironment to explore themes of economy, resource management and sustainability.

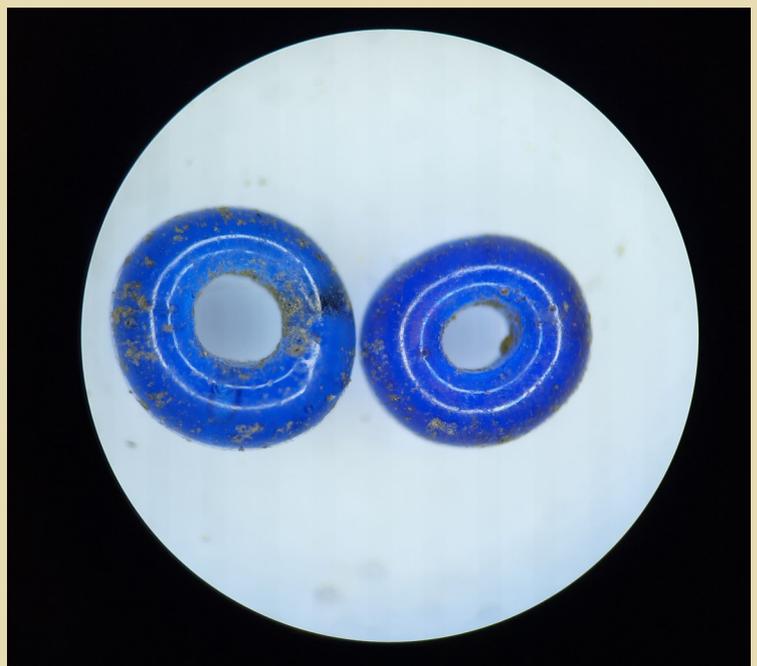
## Images

*Top: Meg Sinclair of the Caithness Archaeology Trust assisting UHI Archaeology Institute Lecturer Scott Timpany during coring at the Site. Archaeological coring is an important methodology for looking at the wider environs and understanding the site within its contemporary landscape setting.*

*Middle: Charred grain recovered from soil samples on the Site tell us a great deal about farming practices from the periods, including the sorts of crops being cultivated, the practices involved in growing and harvesting, and how they processed and stored the grain. Charred grain is also used to obtain Radiocarbon dates*

*Bottom: Miniscule glass beads under the microscope. These tiny artefacts, measuring less than 2mm in diameter, were recovered during processing of soil samples from the site.*

*These artefacts help us to gauge the character of the community who lived at the site.*



# 2021 Excavation Summary

During the 2021 excavation we extended the area of the dig to define the extent of some of the structures partially uncovered in previous seasons.

We also set out to understand how the site developed by looking at the evidence for construction, occupation and abandonment of these buildings.

A crucial area to investigate was the bank of the burn, not least because this part of the site is still under threat from erosion.

A substantial spread of prehistoric pottery was revealed in this area and would seem to represent a small number of vessels, which have impressed finger decoration around the rim.

Radiocarbon dating from charcoal within the layer containing the pottery provides us with a date of sometime between 366 to 192BC, or the mid-fourth to the early second century BC. This is towards the end of the conventional 'Early Iron Age' and represents the period in which we start to see the development of brochs.

The excavation also encountered what may be the remains of some funerary activity. A small stone lined cist was discovered in this area; a common form of burial practice during the Bronze Age. The cist was situated close to soil layers rich in ashy residues and containing tiny fragments of burnt bone and the vitrified residue of fuel from burning. This vitrification occurs at the very high temperatures commonly seen in cremations.

## Images

**Top: Aerial photograph of the site . Photo: Angus MacKay**

**Middle: NVQ Archaeology Student Travis Lowe carefully excavating a spread of pottery**

**Bottom: Pottery fragment with thumbnail impression decoration around its rim. Photo: Tom O'Brien**



The centre of the site is dominated by an irregular shaped building (Structure B).

When archaeologists investigate ancient structures, we tend to think of them like living things. They have a *birth* in their construction, a *life* in which they are occupied or utilised, and a *death*, when they are finally abandoned.

In some buildings this abandoned happens rapidly. They may be deliberately dismantled, destroyed by some catastrophic accident, or brought low by a natural forces.

Some buildings have a more gradual decline, with their lifespan extended beyond their original purpose by modification or re-use.

We still have some way to go before we will reach the layers that tell us about the first use of Structure B. What we can tell from our investigations so far is that at some stage in its history, it was abandoned, and rubble accumulated across its interior as the walls slowly degraded.

This was not the end of the building's life. At a later stage, the rubble was cleared to the edges to accommodate an informal living area. A hearth was set in the centre of that space and a setting for a post within the ring of rubble could have supported a screen or lean-to roof, hastily constructed to shelter these latter day dwellers.

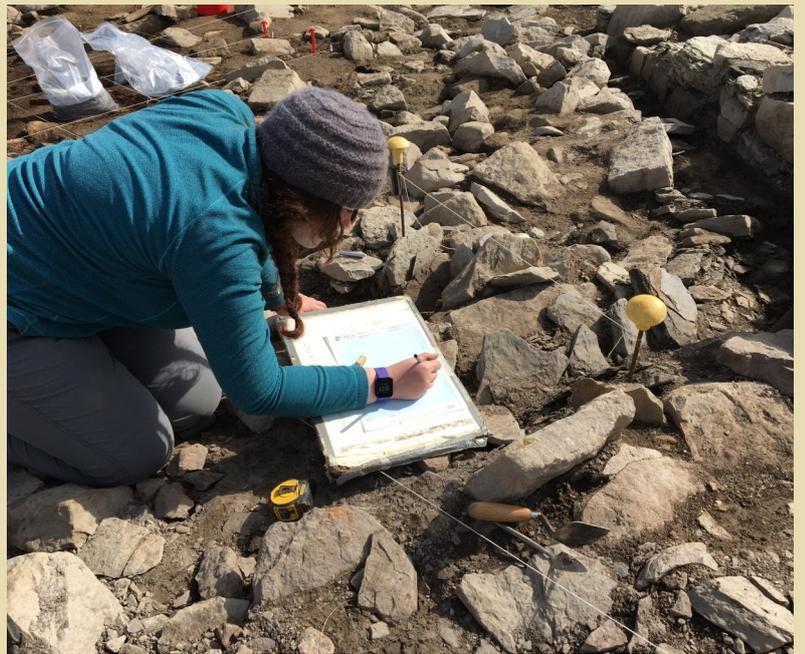
The surface they cleared is littered with the residues of their activity, such as the ash and charcoal raked out of the hearth, charred cereal grains of oats and barley from the food they were preparing and fragments of pottery, trodden into the earthen floor.

### Images

*Top: Structure A at the end of the 2021 excavation season. The dark area in the centre of the building is where the hearth was situated.*

*Middle: Durham University Masters Research Student Leia Tilley records the possible post settings int the rubble of Structure B.*

*Bottom: UHI Archaeology Institute PHD Student Holly Young taking samples from the around the hearth in Structure B.*



This phase of occupation may have been more like a frequently visited campsite, conveniently sheltered next to a source of water, rather than a permanently occupied settlement.

The artefacts associated with this phase of activity offer clues as to who these people were. A whetstone of a type more commonly associated with Medieval or Norse culture, rather than Iron Age settlement, was recovered from the rubble of this building.

The people who stayed here we perhaps not dissimilar to more recent residents of Thrumster, who would come to this spot for picnics and to light fires, when the peats were being cut.

#### *Images*

*Top: The entrance into Structure B is marked by this "threshold" stone within a short passageway on the east side of the building.*

*Middle: An elongated stone bar that has been used as whetstone. Photo: Tom O'Brien*

*Below: Surfaces and rubble layers are carefully planned during the process of excavation.*



The southwestern extension to the site has revealed the scale of a large circular building, Structure D, traces of which were first seen at the end of the 2019 excavation. Work undertaken this year has helped define it, and we can see that it shares part of its architecture with the south wall of Structure B.

We are in the early stage of the investigation of this structure, and so we know very little about it. Its regularity is particularly striking next to the 'squashed' oval shape of Structure B next door. The buildings share some similarities, both having been accessed through short passageways on their east sides.

Samples from deposits within this building contained charred grain of hulled barely and oats, which started to be cultivated from the middle Iron Age onwards.

The traces of a potentially earlier feature (Structure C), have been partially incorporated into Structure D. The remains of this earlier building are defined by upright slabs in a right-angled setting. The most intact slab has the rippled surface of a fossilised lake or riverbed, which is likely to have been deliberately selected for its texture and appearance.

We have only revealed a very small part of Structure C so far, and much of its form may have been destroyed by the later settlement. But the sections we can see are reminiscent of the chamber of a burial cairn, and may represent evidence for an early prehistoric funerary monument predating the Iron Age occupation on the site.

### Images

*Top: Structure B (top) squashed in next to a newly emerging circular building, Structure D.  
Photo: Angus MacKay*

*Middle: Local community volunteers Rhona, Alison and Katherine excavating a layer of rubble in the newly emerging Structure D*

*Bottom: The edge set "ripple stone" in Structure C is a highly visible and aesthetically pleasing piece of prehistoric architecture.*



To the south of the eroding banks of the burn, the excavations revealed a passage structure (Structure A). A stone lined drain was constructed under the floor of the passage, with its capstones forming the paved surface of the building.

This structure has been interpreted as a souterrain, constructed by cutting into and incorporating earlier buildings on the site.

Radiocarbon dating of deposits overlaying the rubble infill of the souterrain returned a date of between 198 to 47BC. This tells us that this structure was abandoned by the mid-first century BC or the 'Middle Iron Age' period.

There are many theories about the function of these enigmatic structures. Were they storage areas, places of refuge, or perhaps sites of some religious significance?

It may well be that there is not a straight forward answer to that question. It is possible, for example, that souterrains have strong ritual and ideological significance *because* of their use for the storage of important materials such as foodstuffs or seed corn.

There may be ritual significance not only in the use of these buildings, but in their construction and decommissioning. The foundational layers of the souterrain at Swartigill contain stone tools which appear to have been purposefully deposited within the construction makeup of the building.

During careful sorting of samples from these construction layers in the laboratory, we have recovered three tiny blue beads.

#### *Images*

*Top: View of the flagstone passage floor of the souterrain Structure A.*

*Middle: View of the site with souterrain in the foreground. Photo: Bobby Friel*

*Bottom: Blue annular glass beads. These artefacts belong to a class of Iron Age "miniscule" bead likely to have been made in Scotland from recycled roman glass. Photo: Tom O'Brien*



These beautiful tiny light blue beads are likely to have formed part of a complex multiple beaded object, such as multi-strand necklaces, or perhaps embroidered on to textile garments as part of clothing or headgear. They may even have been threaded on to people's hair.

During the course of the excavation, we have recovered other artefactual clues that, at least some of the inhabitants at Swartigill, possessed the types of objects that are often thought to confer importance or status.

These include a small fragment of a bronze decorative object, and two shale/cannel coal bangle fragments.



**A fragment of lignite bangle. The chips and scratches around the edges are signs that it was worn with multiple other bracelets or arm rings. Photo: Tom O'Brien**



***A fine grained whetstone, its edge is worn down and polished from use.***

As well as the items of adornment, we have also recovered a growing number of stone tools, used for many purposes throughout history and prehistory. They include several different types of artefact, such as quern stones for the grinding of grain into flour, hammer stones for crushing or grinding, and hone stones for the sharpening and shaping of metal.

Despite the low-key and almost hidden aspect of the site itself, these items of personal adornment paint a picture of a group of people with social agency and means. This is far from a down-at-heel peasant settlement scratching a subsistence-based, hand-to-mouth existence in the shadow of the larger broch settlements.

The small but evocative assemblage of artefacts from Swartigill, help us to gauge the character of the community who lived at the site two millennia ago. They enable us to see past any assumptions that the site fitted neatly into a simplistic social hierarchy.



***Sandstone grinder or hammerstone. Note the worn down edges of the cobble where it has been used for grinding.***

## Community Engagement

We strive to make our projects and activities as inclusive and open as possible, to the local community, but also on a regional and national scale.

During the course of the excavation we have welcomed over 100 visitors to the site, all of whom are offered a tour which explains how the site connects with the cultural heritage of the wider area.

During the 2021 excavation season, 25 volunteers participated in the excavation. These were a combination of local residents and people from outside of Caithness.

The site is a draw for people from varied backgrounds and age groups. Some volunteers are regular participants with archaeological knowledge and excavation skills. For others, the Burn of Swartigill excavation is their first experience of being involved in a dig.

Whether individuals have experience, or come to the site as complete novices, the Burn of Swartigill Excavation provides a relaxed and informal environment for them to meet new people, learn new skills, and look at the past environment from a unique perspective.

Everyone involved in the excavation is helping to shape our understanding of the past and create a lasting legacy for the future.

### Images

*Top: Local community volunteer Alison Smith has been involved in every season of excavation at the Burn of Swartigill.*

*Alison enjoys the physical aspect of digging, and is interested in how our lives are relatable to those of the people who lived here thousands of years ago.*

*Bottom: Retired school head-teacher Rhona Macpherson is a regular volunteer, and has been heavily involved with the school groups who visits to the site.*

*Rhona says that Swarutigll is an important part of the history of Caithness and the Yarrows.*



*“Its great that here, you can be part of it. I can come along as a local and just be welcomed and get involved” Alison Smith.*



*“Its good to get the kids involved; it’s their ancestry and they should know where they come from” Rhona Macpherson.*

## Project Benefits

Participation in an archaeological excavation is to be part of a team endeavour, which instils a tangible sense of achievement in those who participate, regardless of the scale of their individual involvement. Being part of the process of discovery also creates a sense of shared ownership of the cultural heritage, and an understanding of its value.

Interacting with archaeological sites has benefits beyond the enhancement of peoples appreciation and understanding of their cultural heritage.

Visiting heritage sites, such as those at the Yarrows, encourages enjoyment of the outdoors and the natural environment. Such activity can have a significant positive impact on mental health, as well as raising awareness of environmental issues that affect our whole society. The presence of such sites within a community improves the quality of life and mental wellness for those who visit them.

Previous seasons of excavation have also contributed to the local economy , mainly in the form of accommodation for site staff, students and volunteers from outside of Caithness, as well as the use of local services and retailers.

Going forward, the project has the potential to bring even greater financial benefit to the local economy.

### Images

*Top: Roland Spencer-Jones is a regular volunteer on excavations across Scotland, and brings with him a wealth of experience.*

*Roland believes that it is important to find imaginative ways to help people relate to their heritage.*

*Bottom: Anthea Dean and her husband Deryck are regular volunteers on archaeological site throughout the Highlands and Islands.*

*Anthea is now undertaking a Masters degree in archaeology.*



*“I particularly like this site. It’s relatively small and informal. I can make a contribution and get to know people” Roland Spencer-Jones*



*“It’s a great way to stay mentally and physically active, you’re thinking the whole time about what you’re doing, and how you are doing it.” Anthea Dean.*

Historic Environment Scotland estimated that, prior to the Covid 19 pandemic, Heritage tourism contributed approximately **£4 billion** to Scotland's economy between 2018 – 2019.

The North Coast 500 route alone is thought to have contributed over **£22 Million** to the economy of the Highlands.

The Scottish tourist industry is expecting the surge of visitors from 2021, as a result of the lifting of Coronavirus lockdown restrictions, to continue into 2022 and beyond.

Cultural heritage sites, such as those on display throughout the Yarrows, form an important element of Caithness' tourism assets.

The Burn of Swartigill site will form an important enhancement to the Yarrows Heritage trail. Archaeological excavations can be a significant draw for tourists to an area, given the appropriate level of exposure on regional and national levels.

#### *Images*

*Top: Mary Renshaw is a local community volunteer on the excavation and an archaeologist, having graduated from the University of Highlands and Islands Archaeology Institute in 2020.*

*Mary's daughter and niece both attend Lybster primary school, and have visited the site with their classes to take part in the excavation.*

*Bottom: ORCA Project Officer Bobby Friel shows George Watson an aerial view of the site using a drone during his visit to the site.*

*George has been exploring the archaeology of Caithness since he retired in 1991, and has developed a great deal of insight into the ancient landscapes of the region. He has helped on many excavations and has been following the progress of the project since we started in 2015.*

*Not having previously had the opportunity to visit the site, we were extremely happy to welcome him during the 2021 excavation.*



***“All the other digs I've been to, I've had to travel and find accommodation, but here its great, because I can go home every night.” Mary Renshaw***





## The Burn of Swartigill, Caithness

### Project Exposure

The project has seen a steady increase in social media engagement between 2019 and 2022. Regular updates are posted about the excavation on the University of Highland and Islands Archaeology Blog pages.

The Burn of Swartigill content on the UHI website was viewed 6,424 times in 2021, with a further 1,417 views so far for 2022.

The project also communicates the progress of the site using Facebook and Twitter. The UHI Archaeology Social Media reach is difficult to calculate and quantify. UHI archaeology institute tweets relating to the dig were seen up to 900 times during the excavation season.

UHI Archaeology Institute Social Media figures:

- **Twitter followers: 5,321.**
- **Instagram followers: 1,766 (reach 5,408)**
- **Facebook followers: 8,914 (reach 8,609)**

The Burn of Swartigill Twitter account, set up by the excavation team in September 2021, has **120** followers to date and has reached 14,767 people.

The site has featured in print and online news media on numerous occasions, with articles reporting on the progress of the site in the John'O Grote Journal and Caithness Courier new papers. There has also been interest in the site from national newspapers.

Future online engagement for the site will form part of an integrating approach to content and social media output between the UHI and the Yarrows Heritage Trust. This will be achieved through:

- A structured means of producing new content
- Investment in production and presentation of content
- Sharing of content between platforms and organisations

The dissemination of information about the project will be supported by regular project newsletters with details of new findings from the excavation and post excavation programme.

This will also provide a platform for information about how to get involved in the project and a forum for individuals and interest groups to share their experiences of the site.

# Education

Archaeology is an interdisciplinary subject which offers participants the opportunity to learn about heritage in its broadest context.

The Site at Swartigill provides fantastic opportunities for fun educational activities for children. The Site's location within the Yarrows provides access to both cultural heritage and the natural environment, allowing for an integrated approach to school participation.

The excavation team has worked in collaboration with the High Life Highland Countryside Ranger service to facilitate visits from local schools. It is the intention that this connection with the local schools will be strengthened and further explored within the ongoing project framework.

Local school groups have been visiting the site since 2017, and many have seen the excavation develop as they have progressed through their school careers.

During the 2021 excavation, site activity days were attended by over 100 children from:

- Watten Primary School P4-7 classes
- Thrumster P4-7 classes
- Dunbeath P5/6 classes
- Lybster p5/6 and 7 classes.

The school group sessions are an informal learning environment which enables students of all ages to engage with a range of important subjects.

Future visits from primary school groups will be enhanced by follow-up classroom sessions, to further cement the learning outcomes from their participation on site.

***Top: ORCA Project officer Bobby Friel shows visiting school children how to spot artefacts while excavating on the site.***

***Middle: ORCA Excavation Director Rick Barton supervises children from Watten school as they reveal the tops of Iron Age buildings on the site.***

***Bottom: Children from Thrumster school developing their observation skills on the***



# Project Legacy

The elements of the project undertaken to date have been part of a staged approach to manage the long-term goals of the Yarrows Heritage Trust.

## Stage One:

**Evaluate the Site's potential and establish a research agenda for future investigation.** This stage was completed through the initial investigations between 2015 and 2019.

## Stage Two:

**Investigate the Site within a clearly defined research framework and a set timeframe.** This is the current stage of the project. The 2021 excavation was the first of three proposed excavation seasons, followed by a period of analysis, publication and dissemination of the results.

This stage will involve detailed planning of for the long term consolidation and presentation of the site.

The post excavation phase of the project would encompass the production of interpretive material for use in the forthcoming presentation of the site.

The process of discovery associated with the project at this stage is also the best platform for raising awareness of the cultural heritage of the Yarrows on a regional, national and international stage.

## Stage Three:

**A lasting project legacy.**

It is the intention that the archaeological excavations at the Burn of Swartigill will culminate in the consolidation of the site for long term display. This will complement and enhance the existing Yarrows Heritage Trail.

The ORCA and UHI team involved in the project have significant experience in the process of consolidating and presenting archaeological sites.

Consolidation of the Burn of Swartigill site could provide a springboard for future investment into the cultural heritage of the Yarrows, to improve access to and between sites and update interpretive material.

Investment also provides the opportunity to explore the use of innovative means of disseminating information, such as virtual reality and Augmented Reality applications.

