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insight institute**

mobilising knowledge for a better Scotland

Learning from Loss

A SUII programme bringing together an international team of researchers, heritage professionals, and local stakeholders to explore issues surrounding transformation in the historic environment in the face of climate change

Field trip itinerary

10-21 June 2018



**UNIVERSITY of
STIRLING**  **50 YEARS**

 **University of
St Andrews** | **FOUNDED
1413** |

In this intensive fieldtrip, participants will explore a range of issues relating to climate change impacts upon the historic environment through the lens of threatened coastal heritage and vulnerable carved stone monuments. We will learn from the diverse experiences of the participants and explore different situations and alternative approaches enriched with experiences from colleagues from the USA and insights from community heritage managers and stakeholders.

Sites in the itinerary provide good examples of the range of undesignated and designated coastal heritage and carved stone monuments affected. They include well-known and actively managed monuments and locally valued heritage assets with no formal protection or management. Many of these active local groups are involved in their stewardship.

- Sculptured stones
- Coastal erosion
- Stones and erosion



Sunday 10th June

11:15 Meet at [New Calton Burial Ground, Regent Road Entrance EH8 8DR](#)

The [New Calton Burial Ground](#), on Calton Hill overlooking the Old Town of Edinburgh was built as a replacement for the Old Calton Burial Ground in 1817. Initially, it was used for the re-interment of up to 300 bodies from the Old Burial Ground, which were disturbed by the construction of Waterloo Place. It includes a [watchtower](#) - built as a deterrent to prevent grave robbing, which was a particular problem in 18th-19th century Scotland - and the graves of many illustrious Scots as well as Commonwealth War Graves dating to the First and Second World Wars. Along with four other historic graveyards in Edinburgh (including Greyfriars) it's the subject of a project by [Edinburgh World Heritage](#) to involve the local community in revitalising the burial grounds and addressing the problems they face.

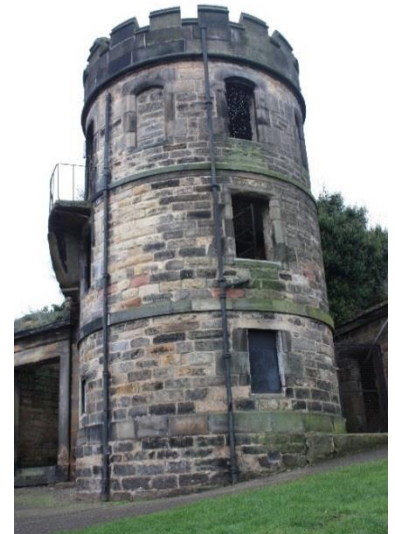


Photo: Stephen C Dickson

[Greyfriars Churchyard, 26A Candlemaker Row EH1 2QE](#)



[Greyfriars Kirkyard](#) was founded in 1561 on the site of a Franciscan Friary which was dissolved in 1559 and takes its name from the grey robes worn by the friars. Although its best-known association is with the Skye Terrier [Greyfriars Bobby](#) that famously guarded his owner's grave for 14 years, it's also closely involved with the history of the Covenanters and home to the graves of a number of [famous Edinburgh residents and significant stone monuments](#).

Photo: Michael Reeve

[Warriston Cemetery, Warriston Road, EH3 5NE](#)

[Warriston Cemetery](#), dating to 1842, was Edinburgh's first garden cemetery, a movement developed in response to Victorian demand for attractive burial grounds which reflected the status and wealth of those buried there. It contains several impressive Gothic memorials, and a number of Celtic cross monuments. As well as several other eminent Edinburgh residents, it includes the grave of Sir James Young Simpson, who first discovered the Pictish carvings of Wemyss Caves. [Following a period of neglect and vandalism](#), an active [Friends group](#) was established in 2013 to care for and celebrate the cemetery and its heritage.

Tuesday 12th June

[Wemyss Caves, East Wemyss](#)

The Wemyss Caves, a group of sea caves on Fife coast, contain a vast range of sculptures, the earliest of which are thought to date to the Bronze Age, as well as the largest collection of Pictish cave carvings in Scotland. These symbols are the earliest style of Pictish art while their location on the Firth of Forth also represents the southern boundary of the early medieval kingdom of the Picts. The [Save the Wemyss Ancient Caves Society](#) was set up in the 1980 in response to threats to the caves, and has recently worked in collaboration with SCAPE on the [4D Wemyss Caves](#) project to record and

celebrate this unique heritage. The beach is littered with collapsed coastal defences – constructed to defend the gas works and other assets along the coast.



Wednesday 13th June

10:00 [St Andrews Cathedral, The Pends, St Andrews KY16 9QL](#)



[St Andrews Cathedral](#) has its roots in the 8th century as a Celtic monastery, becoming a [Cathedral](#) in the 11th century. It was Scotland's premier medieval church and a major centre for pilgrimage. It became one of the first victims of the Scottish Reformation in 1559 following a fiery sermon preached by John Knox when the congregation ransacked the cathedral and destroyed the interior, after which it declined and fell into ruin.

[St Andrews Castle, The Scores, St Andrews KY16 9AR](#)

During the medieval period [St Andrews Castle](#) was the [official residence of the leading bishop](#) (later archbishop) in Scotland. It played an important role during the Wars of Independence against England (1296-1356) and the Scottish Reformation, when it was the scene of some of the bloodiest incidents of the reformation, (including the burning of the Protestant preacher George Wishart; the murder of Cardinal Beaton; and the great siege of 1546-7, when [a mine and counter-mine](#) were



Photo: Historic Environment Scotland

excavated). Although the cliff top location originally formed part of the castle's defences, erosion caused serious damage until the construction of a sea wall in 1886 – one of the first times in Scotland that a coastal defence was built for a heritage site.

[Newark Castle, St Monans](#)

The [original castle structure here may date to the mid-13th century](#), and the Scottish king Alexander III spent part of his childhood with his half-sister and her husband at their castle at St Monans, thought to be on this site. The current building remains probably [date to the 15th century](#). Its cliff-top location makes it one of the most defensive locations on this stretch of coastline, but erosion has destroyed much of the castle, including the entire west side.



[St Monans salt pans, St Monans KY10 2DN](#)

This [18th century saltpan complex](#) forms part of an [industrial landscape of this part of Fife](#), with fuel provided by the adjacent coal mines brought via a wagon way, while the product was shipped out from the harbour at nearby Pittenweem. [During this period, salt was an important commodity for export and to supply the sea fisheries](#), though with the abolition of the duty on imported salt in 1823, the industry entered severe decline. This was one of the largest and most intensive salt works on the Fife coast, with at least nine pan houses, and a wind engine tower which pumped water to them.



Thursday 14th June



Photo: D Lloyd

[Aberlemno Sculptured Stones, Aberlemno churchyard and the B9134](#)

[This collection of four sculptured stones](#) includes a [prehistoric standing stone](#) which was reused by the Picts and carved with [three of the most distinctive symbols in the Pictish lexicon](#); an [enigmatic rough boulder](#) possibly associated with a nearby stronghold; and a [cross-slab](#) which combines traditionally Pictish symbols with [biblical imagery](#) demonstrating the impact of the arrival of Christianity. [A second cross-slab in the churchyard](#) is considered one of the best examples of Pictish carving, a battle-scene on one side may depict the Battle of Nechtansmere, a 7th-century turning point in the history of the Picts which brought an end to the Northumbrian occupation.

[St Vigean, Arbroath, Angus DD11 4RB](#)

The village of St Vigean appears to have been a significant Pictish religious centre, with the church occupying an earlier pre-Christian ritual site. The outstanding [collection of 38 early medieval sculpted stones](#) found in and around the church represent some of the best examples of Pictish art and are mostly now in a purpose-built museum, although were built into the fabric of the church and remain in situ.

[Boddin limekiln, Boddin Point, Montrose DD10 9TD](#)

This [large limekiln](#) was built in the mid-18th century by the landowner during a period of agricultural improvement which generated a huge demand for lime which was spread on the fields to improve the soils and burned lime from the adjacent workings. The low promontory the kiln is built on is seriously eroding, and one corner of the structure has collapsed. A laser scan survey in 2010 recorded the limekiln and created a baseline for monitoring future loss.



Friday 15th June

[Skara Brae, Sandwick KW16 3LR](#)

[Skara Brae](#) needs no introduction as [one of the most famous archaeological sites](#), and the best-preserved Neolithic village in Europe, with the stone walls of the houses incorporating 'fitted' furniture of dressers, box beds, a hearth and small tanks. First exposed by a storm in 1850 with excavations until 20th century, it's now defended from erosion by a sea wall originally built in the 1920s.



Photo: Historic Environment Scotland

[Newark Bay, Deerness, Orkney KW17 2QH](#)

[The site of a chapel and burial ground](#), probably of Norse/Medieval date, where ongoing erosion is exposing human remains. A Pictish cross slab was found and recorded in 2016 and may be related to the chapel.

If there is time, we could also visit:

[Stones of Stenness, Orkney](#)

Dating to c.5,400 years ago, [the Stones of Stenness](#) may be the earliest henge monument in the British Isles. Originally formed of 12 stones, with a large hearth in the interior surrounded by a large ditch and bank, four stones survive.

[Ring of Brodgar, Orkney](#)

The massive stone circle of the [Ring of Brodgar](#) – probably dating to between 2500 and 2000 BC – originally consisted of 60 stones, of which 36 now survive, enclosed by a large rock-cut ditch with at least 13 burial mounds around the stones. Part of a wider ritual landscape, the original function of the site and the exact dates are uncertain as it has never been scientifically investigated, although it was one of the first archaeological sites in Britain to be protected as a Scheduled Monument and is the most popular tourist attraction in Orkney.

Saturday 16th & Sunday 17th June

Sanday site visits with local group

The island of Sanday with a low-lying, predominantly soft, sandy coastline, is one of the areas of Scotland most vulnerable to coastal erosion. Site visits will include some of the following:

[Pool settlement mound](#)

A multi-period settlement mound, with remains dating from the Neolithic to Norse periods. Multiple phases of stone structures and midden deposits are eroding from the coastal section, and although the site has been partially investigated, features that have not yet been excavated are under threat from erosion. On the foreshore in from the mound, an area of water enclosed by stone may be a basin once used as an anchorage.



[Newark settlement mound](#)

A settlement mound with drystone structures and midden deposits (which include high concentrations of fish bone) eroding from the coastal section, and further structures high in the section and visible above ground on the top of the mound. Linear stone structures on the beach in front of the mound have been interpreted as the remains of fish traps or eroded walling. The site has not been investigated and its date and function are unknown - but it is speculated that the remains lower in the section represent a Norse fishing station, while the upper levels are likely to be the remains of 18th/19th century farm buildings.

[Lopness prehistoric settlement](#)

Tentatively identified as a broch with an extra-mural settlement, the main structure has been badly damaged by erosion and more than half appears to have been lost. The section through the building has exposed thick, curving external walls, with piers constructed of drystone walls and large orthostats dividing the interior space along with associated midden deposits. [A further drystone structure immediately to the south](#) has been section by coastal erosion and probably represents a building either associated with the main structure or later in date.

[Quoyness chambered cairn](#)

This Maes Howe type Neolithic chambered cairn probably dates to around 3500-2500 BC. Used for communal burials, it is surrounded by other tombs and cairns forming a Neolithic and Bronze Age funerary landscape. It was first excavated in the mid-19th century and subsequently in the 1950s, when human remains, animal bones, pottery and stone tools were recovered.



Photo: Orkneyjar

[Meur burnt mound](#)

This Bronze Age complex burnt mound, first investigated following its exposure in a 2005 storm, was re-excavated by SCAPE in 2014-15 in partnership with the local community, when the main elements were relocated and reconstructed at Sanday's heritage centre. Excavation revealed a 3m deep well which still filled with freshwater and preserved palaeoenvironmental remains – together with an underlying Neolithic well, upon which the later features had been deliberately constructed.

[Northskail settlement mound](#)

A settlement mound which has been half-sectioned by coastal erosion with drystone structures and deep deposits of organic anthropogenic soils. Although the site has never been investigated, a copper alloy object and fragment of pottery, tentatively dated to the Bronze Age have been recovered from the section. [A ruined stone building](#) immediately to the south appears to have been a combined store (on the ground floor) and dwelling (on the upper floor).

[Scar boat burial](#)

The [site of a Viking boat burial](#) revealed by erosion and excavated in 1991 and thought to date to the late-9th to mid-10th centuries. Although the boat itself had rotted, it had been placed into a stone-lined pit and the remains of over 300 rusted iron rivets defined its shape. It contained the remains of a man, woman and child, and a rich collection of grave goods including the famous whalebone Scar Dragon Plaque.



Photo: Michael Maggs

Monday 18th June

Orkney Mainland site visits could include visits to these two eroding sites (both defended with sea walls):

[Broch of Gurness, Orkney KW17 2NH](#)

The [Broch of Gurness](#) is a Middle Iron Age broch and associated village which stand within a complex landscape of broch towers along the coastal stretch of Eynhallow Sound. The extensive surrounding village is formally organised and enclosed by defensive ditches and ramparts. Later Iron



Age, Pictish and Norse structures on the site continued after the abandonment of the broch, while the 9th century burial of a Viking woman represents that last phase of activity here.

Photo: Historic Environment Scotland

[The Brough of Birsay, Orkney KW17 2LX](#)



[This tidal island](#) was home to a high-status settlement from the 7th century until the medieval period. It was probably a centre of Pictish power, the seat of the Earldom of Orkney under Earl Thorfinn and the site of the first Orcadian bishopric. The subsequent Norse settlement (which

most of the visible remains relate to) may have been deliberately located on the site of the important Pictish centre and includes the 12th century church and monastery.

Tuesday 19th June

Thurso and Wick site visits may include:

[Castlehill Heritage Centre and pavement works, Castletown, Thurso KW14 8TG](#)

This [extractive and industrial complex](#) forms a flagstone works consisting of quarries, cottages, offices, a harbour and spoil tips located on the coast edge which are being severely damaged by erosion. The works was of major importance for the local economy and the Caithness flagstones they produced were exported all around the world (much of the stone was used to pave Edinburgh's streets). An active heritage group runs the [local heritage centre](#).

[Nybster Broch, Nybster, Wick KW1 4XR](#)

A [broch and extensive associated settlement](#) located on a high cliff-top promontory. The site was excavated by the antiquarian Sir Francis Tress Barry who was prolific in investigating the brochs of Caithness. A [large monument to Tress Barry](#) decorated with fantastical sculptures and probably constructed of stone excavated from the broch now sits on the landward side of the site.



[Castle Sinclair Girnigoe, Wick KW1 4QT](#)

This [imposing castle](#), the stronghold of the Earls of Caithness, sits on a high rocky promontory in an extremely defensible location, with the sea on one side, a 'goe' (a Norse word meaning a deep rocky inlet) and the narrow approach cut off by two rock-cut ditches. The original phase is late 15th century



in date, with significant rebuilding in the 17th century.

[The Whaligoe Steps, Whaligoe, Caithness KW2 6AA](#)



This [dramatically located fishing station](#) at the bottom of a steep goe and surrounded by sheer high cliffs is accessed by [a long flight of doglegging stone steps](#) (allegedly 365, though sources differ on the exact number). It was used by fishing boats during the herring fishery and schooners which brought salt and carried away barrels of cured herring, with activity peaking in the 19th century, though they remained in use for salmon fishing until the 1960s.

[Site visit, Brora salt pans, Brora Back Beach](#)

The [Brora salt pans](#), excavated by SCAPE in partnership with the local community and [Clyne Heritage Society](#), were first established in the [late 16th century](#) by the Sutherland Estate. They used local coal from the small pocket of Jurassic geology on this stretch of the coast to boil seawater to extract the salt. Later saltworks in the same area date to the [18th](#) and 19th centuries. The old salt pans have faced significant erosion and the large building excavated by the community has now collapsed.



Wednesday 20th June

[Dornoch](#)



Dornoch is a small historic town famous for long stretches of sandy beaches, its impressive cathedral and championship golf course. The excellent [Historylinks](#) museum tells the history of the area, while the surrounding area is rich in wildlife, with a variety of species including sea birds, otters and seals. The kirkyard includes the [Plaiden Ell](#), one of only three Ells to survive in the country. The Ell was an ancient measure of length, mostly used for measuring cloth, and the stone was used to standardise such measurements during ancient markets held in the area.

[Loch Fleet boat graveyard](#)

[Loch Fleet](#) was a safe haven used by the herring fishing fleets of Embo and Golspie fishing villages in the late 19th and early 20th centuries, and the south shore contains a boat graveyard with the remains of at least 17 fishing boats of the distinctive 'Zulu' type which dominated the east coast herring fishery (although very few examples now survive). The site was [surveyed by SCAPE](#) and the [North of Scotland Archaeology Society](#) in 2014.

