

The University of the Highlands and Islands Archaeology Institute

Annual Review

2016 - 2017



Ring of Brodgar

Issue Two

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MISSION STATEMENT

The University of the Highlands and Islands Archaeology Institute is a world-class teaching and research organisation dedicated to advancing our understanding of the historic environment through the creation, interpretation and dissemination of archaeological knowledge.

The Institute commits to providing a locus for innovative research, university education and lifelong learning in outstanding heritage environments. We support local, regional and global communities to explore and promote their heritage and development through our expertise in consultancy and research.

Our forward thinking and interdisciplinary approaches to archaeological and heritage research, and our worldwide links and collaborations, create in the UHI Archaeology Institute a vibrant international centre of excellence.

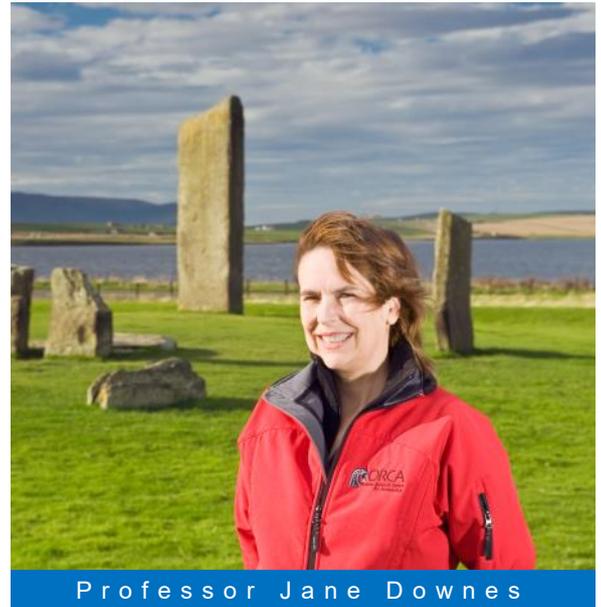


WELCOME FROM THE DIRECTOR

Welcome to our second UHI Archaeology Institute Annual Review, and thank you for your continuing interest in our work. We have had a full year, providing excellence in university education, commercial services, training and lifelong learning.

We have had a number of staff changes within the Archaeology Institute, saying fond farewells to Lecturer Mary Macleod, Marine Archaeologist Sandra Henry and Geomatics Officer Mark Littlewood, all of whom have departed to take up exciting opportunities elsewhere.

Nick Card has been successful in gaining LEADER funding to dedicate his time to the Ness of Brodgar, and enabling Anne Mitchell to take a role as Project Officer. Nick has stepped aside from ORCA and we have welcomed Pete Higgins as the new ORCA Senior Project Manager.



Professor Jane Downes

Our academic staff have been greatly augmented by the arrival of Professor Colin Richards in January 2017 as a UHI Executive Office appointment, based at Orkney College, as well as part time Lecturers Dr Antonia Thomas, Dr Hugo Anderson-Whymark and Dr Siobhan Cooke joining the Institute teaching team. We are in addition delighted to welcome Olwyn Owen as UHI Visiting Reader to the Institute; Olwyn's expertise in Viking archaeology is well known, and she is presently working to bring the important site at Tuquoy, Westray, to publication. Our students continue to distinguish themselves and make us proud. PhD candidate Esther Renwick graduated this September and was awarded the accolade of UHI Postgraduate Student of the year.

With record breaking numbers of tourists arriving as cruise passengers, coach parties and independent travellers, the Ness of Brodgar witnessed a huge increase (up by 63%) in visitor numbers. Intense media interest in the Ness of Brodgar has brought new audiences to archaeology and new visitors to Orkney. The excavations at Skail and Swandro on Rousay, at The Cairns on South Ronaldsay, and Cata Sand on Sanday experienced increases in visitor numbers, and provided foci for the interested public to visit and benefit other islands.

Our grateful thanks go to the funders of the Archaeology Institute project: Highlands and Islands Enterprise, Orkney Islands Council, the Robertson Trust and the University of the Highlands and Islands.



The Ness of Brodgar Team 2017

Jim Richardson

RESEARCH – FEATURED STAFF PROFILES

Professor Colin Richards



Professor Colin Richards joined us in January 2017 and is continuing the UHI Archaeology Institute mission to challenge accepted thought in archaeology.

A new study, *Settlement Duration and Materiality: Formal Chronological Models for the Development of Barnhouse, a Grooved Ware Settlement in Orkney*, co-authored by Colin and published in **The Proceedings of the Prehistoric Society 82:193-225**, questions the previously understood narrative for prehistoric life on Orkney through the interrogation of more than 600 radiocarbon dates.

The study is part of the ground-breaking ‘**The Times of Their Lives**’ project, funded by the European Research Council, Historic England and Cardiff University, which has applied the same methodology to a wider series of case studies across Neolithic Europe enabling much more precise estimates of the timing and duration of events in the period c.3200-2500 BC.

Dr Jennifer Harland



Dr Jennifer Harland has recently completed an analysis of the largest collection of Roman fish bones found in the UK. This research led to Jen writing a chapter in the publication **The Roman Amphitheatre of Chester Volume One. Fish Bone from Roman Phases.**

Jen, working with Andrew Jones, David Orton and James Barrett has also published research into **Fishing and Fish Trade in Medieval York, Chapter 15 in Cod & Herring: The Archaeology & History of Medieval Sea Fishing.** Working with Wim Van Neer, an initial exploration of fish bone pathologies will be published in 2018 in the book **Care or Neglect?: Evidence of Animal Disease in Archaeology, Chapter 17, Weird Fish: Defining a role for fish bone pathologies.**

A major re-analysis of the fish remains unearthed at Skara Brae during the 1980s excavations is also being undertaken by Jen in 2017 and 2018. This study will contribute greatly to the understanding of Neolithic diets as well as attitudes towards the sea at this iconic Orcadian settlement. Jen is contributing to the research on two Viking Age/Late Norse and medieval sites: Earl's Bu, with Colleen Batey and Ingrid Mainland, and Tuquoy, with Olwyn Owen et al. Both of these sites produced substantial ecofactual assemblages, including vast quantities of fish remains. Jen is also continuing research into fishing practices from the post-medieval and early modern periods, using material from our ongoing Skail Farmstead excavation in Rousay. Jen completed the UHI's PG Cert in Tertiary & Higher Education with distinction.

RESEARCH – FEATURED STAFF PROFILES

Dr Sarah Jane Gibbon

Dr Sarah Jane Gibbon's research focusses on the medieval church in Orkney, with specific reference to parish formation, pilgrimage and places of power and religion. She has recently given papers on St Magnus Pilgrimage in Orkney to audiences in Orkney (St Magnus Day Lecture, April 2017, Birsay, Orkney), Norway (St Olaf Conference 2017, May, Trondheim) and Lithuania (EAA Conference, September 2017, Vilnius).

Sarah Jane continues to be a trustee of 'Orkney Pilgrimage' and was instrumental in the research and creation of the St Magnus Way pilgrimage route through Mainland Orkney – partly financed by the Scottish Government and the European Community Orkney LEADER 2014-2020 programme. Sarah Jane's year has been busy, also contributing a chapter in '**Castles and Galleys: A Re-Assessment of the Historic Galley Castles of the Norse-Gaelic Seaways**' published by the Islands Book Trust. The book summarises the 2015 conference on Galley Castles organised by the Islands Book Trust, HES and Macneil of Barra.



Sarah Jane is undertaking a UHI-funded sabbatical, researching the potential of an 'archaeology of pilgrimage' to enhance understanding of sacred mobility in the North Atlantic Region.

Dr James Moore



Dr James Moore is engaged in innovative research using the shared language of art and archaeology. Working with local visual artist Rik Hammond, the Yesnaby Art and Archaeology Research Project (YAARP) brings together staff and students from the University of the Highlands and Islands Archaeology Institute, artists and volunteers with the aim of creating a unique view of the archaeological landscape of Yesnaby, West Mainland, Orkney.

This is the third year of YAARP, part-funded by the Orkney Islands Council Culture Fund, and this year the team have focused on creating unique digital and traditional artwork in the field based on the natural and cultural landscape.

James is undertaking a UHI-funded sabbatical in 2018, researching the nature of datasets in Landscape Archaeology, including analysis of the geophysics dataset from the "Heart of Neolithic Orkney" World Heritage Site project.

RESEARCH – FEATURED STAFF PROFILES

Dr Ingrid Mainland

Dr Ingrid Mainland continues her research on medieval and Post Medieval Scottish faunal assemblages, undertaking post-excavation analysis of the Viking and Late Norse assemblages from Earls Bu (in collaboration with Colleen Baty) and Tuquoy, Orkney (in collaboration Olwyn Owen). In 2017, she was invited to attend the 18th Viking Congress, Denmark, presenting her recent research on commensality and feasting behaviour in Late Norse Orkney.

Ingrid has established new collaborations with Aberdeen University and North of Scotland Archaeological Society to work on the Rhynie (Aberdeenshire) Late Iron Age and Rosemarkie (Black Isle in Highland Scotland) Pictish assemblages.

International collaborations include participation in DataARC, a National Science Foundation-funded project (led by Coleen Strawhacker, University of Colorado), which seeks to foster interdisciplinary and collaborative research on long-term human ecodynamics of the North Atlantic through the development of digital resources and tools. In 2017 Ingrid has attended DataARC workshops in Edinburgh and Sweden and developed zooarchaeological data sets for proto-type digital resources.

In addition, project work on the National Science Foundation-funded, **'Assessing the Distribution and Variability of Marine Mammals through Archaeology, Ancient DNA, and History in the North Atlantic'**, undertaken in collaboration with Vicki Svabo, W. Carolina University (PI) has begun, with Claire Mackay (MLitt by Research) commencing her research on Late Iron Age to Norse Orkney cetacean evidence.



Thanks to Ken Amer

Dr Scott Timpany

Dr Scott Timpany is investigating climate change during the Mesolithic when sea levels were rising rapidly and people would have observed their land changing as freshwater wetland became saltmarsh, and lands were lost to the sea.

The **'Turning Back the Tides: Investigating Orkney's submerged landscape'** project, funded by the Carnegie Trust and Historic Environment Scotland, aims to reconstruct the landscape of Orkney from the Mesolithic period to the Early Bronze Age, a timeframe of some 6,000 years.

Scott's research deals with themes very relevant to the modern world: how people reacted to climate change in terms of resilience and adaptability.



RESEARCH – FIELDWORK PROJECTS

Cata Sand, Sanday, Orkney

Directors: Professor Jane Downes UHI, Professor Colin Richards UHI, Dr Vicki Cummings UCLan.

The dig commenced on the 14th August and continued until the 8th September 2017 and investigated the geophysical responses and midden deposits that were located when the team visited in February 2017. The excavation team included Prof Colin Richards, Prof Jane Downes, Christopher Gee from the UHI Archaeology Institute and Dr Vicki Cummings from University of Central Lancashire (UCLan) in addition to participants from the Sanday Archaeology Group, University of Cambridge, and students from UHI and UCLan. The project also involved specialists from as far away as the School of Conservation and Restoration of Cultural Heritage, Galicia, Spain.



Cata Sand Excavation

The excavation at Cata Sand on the Orkney island of Sanday unearthed a few surprises including the discovery of Early Neolithic Houses and the skeletons of whales from the nineteenth century. Eight individual whale skeletons were lifted and transported carefully to the UHI Archaeology Institute laboratory in Kirkwall.

The main house has a stone set hearth, internal pits and boxes, and remains of the lower courses of a double-faced thick stone outer wall and small dividing stones, which partition the house into different living areas. This phase of the structure is comparable with examples of dwellings at Stonehall and Knap of Howar, Papa Westray. Although excavations at Pool uncovered some early Neolithic structures in the 1980s, this is the first 'classic' early Neolithic house to be discovered in Sanday.

A range of finds associated with the Neolithic house including some fragments of pottery, Skail knives, a grinding stone, flint working remains and animal bones have been unearthed. Preservation is excellent and the floor deposits are a deep red-brown colour and are rich in organic remains. As the site is located on sand there is good bone preservation, which is quite rare in other early Neolithic Orcadian settlements. This high degree of preservation will allow us to obtain a unique level of information regarding daily life within the Early Neolithic house.



Work on whalebones from Cata Sand



House wall at Cata Sand

The unique character of Cata Sand continues to attract intense media interest with articles appearing regularly in the local, national and international press including three articles on the BBC News, two articles in The Times in addition to a feature in Newsweek Magazine and Current Archaeology Magazine. The excavation also featured on BBC 4 'Digging for Britain' in November. Social media activity was encouraging with the story concerning Early Neolithic Houses and 19th Century Whales being shared over 1,000 times.

RESEARCH – FIELDWORK PROJECTS

The Ness of Brodgar, Orkney

Director: Nick Card, UHI



Following a successful bid for funding through the Orkney Islands Council LEADER Funding programme 2014-2020, Nick Card of the UHI Archaeology Institute has been able to devote his time to being Director of the Ness of Brodgar. The site is also supported by the Ness of Brodgar Trust, American Friends of the Ness of Brodgar, and Orkney Islands Council.

This funding has allowed Nick to undertake more Ness specific research and writing, and develop further funding bids for the project. In relation to this Nick convened and chaired a 3 day meeting attended by the 25 specialists involved in the Ness, to discuss the ongoing post-excavation programme and future publication.

The project provides the focus for a number of postgraduate researchers, and the data that the site provides has international value for the academic professionals who visit each year. Collaborations include those with Sam Harris, Cathy Batt and Ian Armit (University of Bradford) on developing archaeomagnetic dating in the Scottish Neolithic, and continuing research into XRF Spectral Data Analysis within a Neolithic Context with Scott Pike of Willamette University, Oregon.



Despite it being over fourteen years since the discovery of the Ness complex, the site continues to produce stunning artefacts and discoveries on a daily basis. The last season of work July – August 2017, saw more artwork, incredible stone tools and — in a first for the Ness — a beautiful example of an Early Bronze Age barbed-and-tanged flint arrowhead, recovered from just above the bone deposit surrounding Structure Ten. The Ness of Brodgar also provides student-training opportunities through the Field School, as well as hosting a Kids Club, and volunteer programmes.

It is not just the artefacts that draw people to the Ness. It is the whole package of seeing an excavation under way. With visitor numbers over 20,500 for 2017 (up by 63 per cent) and the daily online dig diary recording a 30 per cent increase in traffic, it is clear that public interest continues apace.

“Since we started work, one of our main aims was to take the archaeology and share it with as many people as we can. Going on the visitor figures, this seems to be working, and we’re looking at other ways to further improve this, both online and on-site.”

Nick Card, Director of the Ness of Brodgar

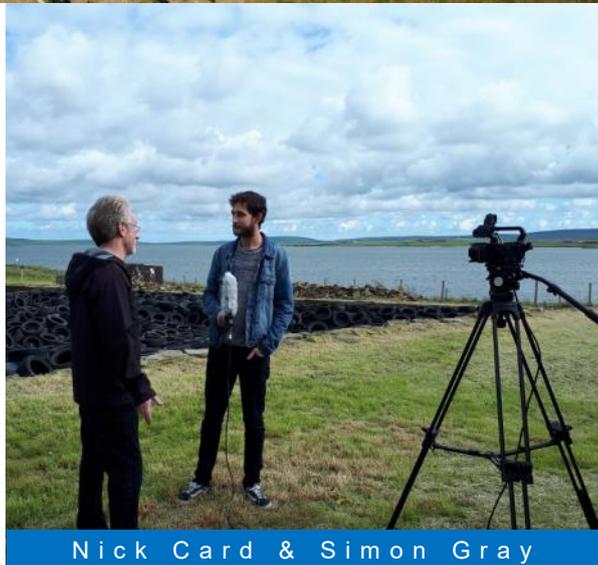
RESEARCH – FIELDWORK PROJECTS



Overview of the Ness of Brodgar

Hugo Anderson-Whymark

The 'Ness Effect' continues with the site attracting more media attention and contributing to the positive perception of Orkney as a tourist destination. This is reflected in the Orkney Volume Tourism Management Study Report 2017 (commissioned by Orkney Islands Council) which states that visitor numbers are up this year and the economic impact of tourism rose from £46 million to £65.5 million (pp. 7-10). The hugely popular BBC documentary **'Britain's Ancient Capital: Secrets of Orkney'** used film taken at the site as a centre piece to the programme. UHI MSc Archaeological Practice student Simon Gray contributed greatly to the reach of the site through his Ness of Brodgar video diary, entitled Ness of Brodgar: People, Place and Perception.



Nick Card & Simon Gray



The new **Ness of Brodgar website** was launched this year and attracted over **180,000** visitors in its **first two months**. Social media activity was intense with Facebook reach of **402,000**, Simon Gray's People, Place & Perception video clips were viewed **121,035** times and Twitter logged **241,524 impressions** in the eight weeks of the dig itself.

RESEARCH – FIELDWORK PROJECTS

The Cairns, Orkney

Director: Martin Carruthers, UHI



This Iron Age broch is hidden on the edge of the rolling South Ronaldsay landscape. Once towering, the broch is now collapsed and the rubble conceals a huddle of internal cells, stairways and souterrains. The Cairns Excavations, which this year ran from 12th June to 7th July 2017, are altering our view of social change in the Iron Age. The broch provides evidence for major cultural transformations between Middle and Later Iron Age, and indicates that previous, conventional models of society for this period may only have been grappling with part of the story.

Site Director, Martin Carruthers' main research focus is on the Scottish Atlantic Iron Age and archaeological theory, and this season saw Martin's team investigating the terracing of the site, showing that the builders of the broch must have seriously landscaped the hillside by moving hundreds of tonnes of earth, clay and boulders to create a level platform for the broch.

The ditch surrounding the broch itself turned out to be very rich in artefacts and animal bones, with quantities of pottery and several metal objects including the so-called 'proto hand-pin', a type of decorative Iron Age bronze pin which are thought to have been in currency in the 3rd - 5th Centuries AD.



Beyond the ditch the team explored an extended settlement including the wall-tops of at least two, possibly three, Iron Age buildings. One of these has a nicely built curving wall and may turn out to be a roundhouse.

A little blue glass bead find is a 1st or 2nd Century AD Roman type, known as a bi-conical blue bead, and only a couple of others have been found at Scottish Iron Age sites. Found in one of the cells of the broch, it may show how the site's occupants were involved in extended exchange links with the Roman province.

RESEARCH – FIELDWORK PROJECTS

The Cairns, Orkney



The Cairns Extra Mural Settlement Excavation

Media interest continued this year in the site with exposure on local, national and international media channels including BBC News (five times), The Daily Mail, Current Archaeology, History Scotland Magazine, Archaeology Magazine (USA), Radio Orkney and The Orcadian.



'The Hope School' Fieldtrip

The Cairns attracted the largest number of visitors to the site of any season so far with a 70% uplift from last year. Local primary school children and teachers also worked with Martin and the team to give the children an opportunity to learn about their local heritage and history.

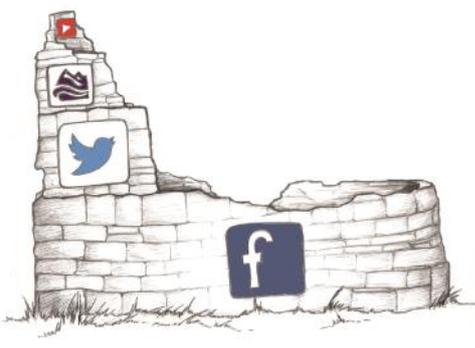


Visitors to the site

9,300
(You Tube)
13,000
(UHI Blog)

20,071
(Twitter)

212,447
(Facebook)



The **social media profile** increased through the use of **'live-tweeting'** using The Cairns' own Twitter and Facebook feeds, the incorporation of the dig diary into the Archaeology Orkney blog and the creation of a series of **on-site videos** touring the site. Facebook **reach** was **212,447**, on-site video views numbered **9,300** Twitter reached **20,071** 'impressions' and the Dig Diary received **13,000** views.

RESEARCH – FIELDWORK PROJECTS

Skaill & Swandro, Rousay, Orkney

Directors: Dr Ingrid Mainland UHI & Dan Lee UHI

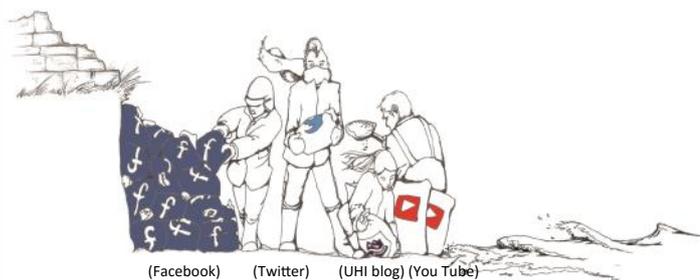
Dr Ingrid Mainland, Dan Lee, Dr Jen Harland and Dr Sarah Jane Gibbon together with a team of local volunteers and school children embarked on a programme of archaeology in Rousay, Orkney over the summer 2017. As part of the Heritage Lottery Funded: 'Stories, Stones and Bones' grant the project focussed fieldwork and research at the medieval and post-medieval site of Skaill in Rousay ('Rousay, Egilsay and Wyre: Land & Sea - Exploring Island Heritage, Past & Present').



Visitors to the Skaill Excavation

Rousay's Summer of Archaeology culminated in a host of activities along the west shore during July.

Excavations were carried out at the coastally eroding site at the Knowe of Swandro (by an international team from the University of Bradford, University of the Highlands and Islands Archaeology Institute, City University New York, and William Paterson University, New Jersey) and at Skaill farmstead.



Social media reach

west shore of Rousay; from the Neolithic, Iron Age, Pictish, Viking and Norse periods to the 19th century clearances.

Work at the sites framed a series of community activities and workshops including test pit excavation at Skaill, training placements for Rousay residents, metalworking workshop, bones and environmental workshop, experimental archaeology, and open days at the two excavations. Over the month, the sites received 130 visitors, from Rousay and all over the world.

This year marked the creation of the Swandro-Orkney Coastal Archaeology Trust (a Scottish Charitable Incorporated Organisation) which aims to advance education and provide opportunities for recording and community involvement in archaeology, through the rapidly eroding coastal heritage of Orkney.



Community involvement at Swandro and Skaill

RESEARCH – FIELDWORK PROJECTS

Rarotonga and Aitutaki

Directors: Professor Jane Downes UHI, Professor Colin Richards UHI, Professor Kate Welham Bournemouth University

Professor Jane Downes and Professor Colin Richards continue to develop links with the South Pacific region. The first phase of the ***‘Archaeological investigation of prehistoric routes and roots on Rarotonga and Aitutaki’*** archaeological fieldwork was completed in 2017 with the aims of identifying, recording and mapping archaeologically visible sites using hand-held GPS systems and photography through fieldwalking and non-intrusive geophysical survey of selected sites. The research project is the first stage of the Cook Islands Archaeological Research Project (CIARP), part of the broader Pacific Islands Tangible Cultural Heritage (PITCH) programme.



Stage One work was undertaken between 18th May and 25th May 2017, led by Profs Colin Richards and Jane Downes, UHI, with Prof Kate Welham, Bournemouth University, Francisco Torres Hochstetter, Museo Antropologico Padre Sebastian Englert, Easter Island, and Lawrence Shaw, New Forest National Park.

The Official Development Assistance (ODA) funded fieldwork was undertaken in two of the Southern Cook Islands: Rarotonga, and Aitutaki. The Cook Islands is on the Development Assistance Committee (DAC) list of countries in receipt of ODA as an Upper Middle Income Country.

The archaeological fieldwork is research driven in investigating the social and ritual role of Polynesian roads (ara), or ‘routes’, in Rarotonga and Aitutaki. It also contains a strong ‘capacity-building’ component, in establishing a sites and monuments record for the two islands, which can guide both future infrastructure project parameters and inform the development of cultural heritage management and cultural tourism in the Southern Cook Islands, and an education/outreach element engaging with the local community and schools. Reports are available online <https://www.uhi.ac.uk/en/archaeology-institute/our-research/research-projects/>



RESEARCH – DEGREES

New Research Students

The Archaeology Institute is continuing to build on its reputation for excellence through our postgraduate research programme. The number of postgraduate students continues to rise and this year included two PhD programmes funded through European Structural Investment Funds (ESIF), researching the origins and development of foodstuffs in Scotland.

The new MLitt by Research offered has also attracted three high quality students this year. Scotland is justifiably famous for the quality of its surviving archaeological remains, and the Scottish archaeological resource continues to be a source of inspiration and research enquiry in modern fieldwork and in new interpretations. The work of the Institute explores the contribution that Scottish archaeology has made, and continues to make, to the global study of archaeology, and provides a survey of the relationship between interpretations of the past and the historical and intellectual background, the national cultural and political threads and imperatives that have run through the study of archaeology.

Jane Thomas is commencing her ESIF PhD this year entitled: *Salmon Consumption, Commerce and Custom: Historical and Archaeological Evidence for the Social, Cultural and Economic Position in the Scottish Highlands from 1400AD to 1800AD.*

Darroch Bratt began his ESIF PhD research in September entitled: *The Origins and History of Distilling and Whisky Production in the Scottish Highlands and Islands: An Historical and Archaeological Approach.*

Claire Mackay embarked upon her MLitt by Research in October 2017 entitled: *Marine Mammal Exploitation in Late Iron Age and Medieval Orkney.*

Crane Begg commenced his MLitt by Research in October 2017 entitled: *Visualisation of the Historic Landscape of the National Scenic Area and World Heritage Area of Orkney utilising LiDAR-derived Surface Modelling and Multi-Spectrum Aerial Photography.*

Kevin Kerr started his MLitt by Research in October 2017 entitled: *Destruction as Foundation: An Archaeological Analysis of the Construction and Decommissioning of Monumental Iron Age Buildings in Orkney.*

Sandra Henry started her PhD in January 2017 entitled: *Prehistoric Seafaring in Scotland and Ireland.*



Kevin Kerr

RESEARCH – DEGREES

Continuing Research Students



Jasmijn Sybenga

Jasmijn Sybenga is in her second year of her PhD entitled: *Seeing the Wood for the Trees. A Palaeological approach into the research of past natural woodland in the Scottish Highlands*. Jasmijn's research is funded by a Forestry Commission Scotland Funded Studentship and UHI.

Magdalena Blanz is in her second year of her PhD researching: *Seaweed as Food and Fodder in the North Atlantic Islands: past, present and future opportunities*. Magdalena's research is funded through a European Structural & Investment Fund (ESIF) studentship.

Martha Johnson is in her final year of her PhD research into the Ness of Brodgar. Her research is entitled: *The Rocks that Don't Belong: Macro Petrologic Analysis of Rock Recovered from the Ness of Brodgar Excavations*.

Alison Keir is writing up her European Social Fund-funded PhD Research entitled: *Coastal Change and Heritage in Northern Scotland*.

Recent Doctorate Students



Ring of Brodgar

Dr Siobhan Cooke submitted her PhD research in March 2017 and graduated 4th February 2018. Siobhan is now working at the Stromness Museum as Museum Collections Development Officer and lecturing at the UHI Archaeology Institute.

Dr Esther Renwick completed her PhD, graduated in September 2017 and received the University of the Highlands and Islands 2017 Postgraduate Student of the Year award for her research on presenting archaeological monuments to the public. Esther is a founding member of Archaeology Shetland and has been an active participant in a self-support group for Shetland-based postgraduate research students.

DEGREE PROGRAMMES

The UHI has provided undergraduate BA degree programmes in Archaeology since the 2011-12 academic year. We currently offer a single BA (Hons) in Archaeology together with joint BA degree programmes in Scottish History & Archaeology, History & Archaeology and Culture, Heritage & Archaeology in addition to a BSc in Archaeology and Environmental Studies. Recognition of excellent practice in learning and teaching in our curriculum was gained in 2016-17, through the award of Fellowship of the UK Higher Education Academy (HEA) by portfolio, to several of our lecturing staff: Fellow of the Higher Education Academy (FHEA) – Dr. Sarah Jane Gibbon, Dr. James Moore, Dr. Scott Timpany; Senior Fellow of the

Higher Education Academy (SHEA) – Dr. Ingrid Mainland.

Dr. Jen Harland is currently working towards HEA accreditation through the PGCert in Education, and has completed the taught element of this programme (with Distinction).



2003
4 students



2012
43 students



2017
146 students

Growth in student numbers

Undergraduate Degree Programme

The blended approach to teaching which combines video conference teaching techniques with traditional face-to-face learning has contributed to the growing success of the courses on offer at the University of the Highlands and Islands. Overall undergraduate numbers have remained stable this year with 123 enrolled across the whole UHI network.



Connor Marrs

We had **27 graduates** in undergraduate Archaeology degrees in 2016-17: **16 BA (Hons) Archaeology**, **3 BA (Hons) History and Archaeology**, **3 BA (Hons) Scottish History and Archaeology**, and **5 BSc (Hons) Archaeology and Environmental Studies** of which **2** were awarded a **First Class Honours degree**. **18 students** graduated from our taught **postgraduate portfolio**, **2** with a **distinction**.

The University of the Highlands and Islands was one of the first UK institutions to introduce student-led teaching awards. The Highlands and Islands Students' Association Awards, now in its eighth year, recognises excellence in 14 categories, with winners coming from around the university partnership. Dr Sarah Jane Gibbon, lecturer in archaeology, has been 'Highly Commended' in the 'Best Research or Dissertation Supervisor Category' by students studying at the University of the Highlands and Islands Archaeology Institute for her work as research and dissertation supervisor for the undergraduate degree programme.

A number of our recent graduates have gone straight into cognate employment or research degrees -

- Kai Wallace (AOC Group Ltd)
- John Musgrove (AOC Group Ltd)
- Karen Kennedy (North of Scotland Archaeological Society)
- Ben Price (PhD, University of Kent)
- Andrew Prentice (PhD, University of Edinburgh)
- Kevin Kerr (MLitt by Research, University of the Highlands and Islands).



Kai Wallace

DEGREE PROGRAMMES

Postgraduate Degree Programme

A total of 23 students were studying for postgraduate qualifications in 2017. The MLitt Archaeological Studies has attracted a record number of students in 2017-18 year with 15 postgraduates commencing their studies. This includes for the first time 5 students based in the USA. MLitt by Research has attracted 3 students this year. The MSc Archaeological Practice is also attracting a growing number of students.

The Virtual Lab teaching module, new microscope equipment, technical video recording equipment, microscopy and image analysis facilities for ecofactual materials examination and 3D modelling software is now embedded into teaching and has contributed greatly to the concept of blended learning at The Institute.



Magdalena

Congratulations to Magdalena Blanz, UHI Archaeology Institute PhD student, who was awarded first prize at the UHI postgraduate conference in Oban for her presentation "On the difficulties of dating seaweed-eaters", and presented a paper on "***Seaweed in island economies - what can we learn from the past?***" at the Future Perspectives for Island Society: Sustainability and Self Management Conference held at the University of the Ryukyus, Okinawa, Japan November 17-21 2017.

Art & Archaeology Contemporary Theory & Practice Masters Module

In 2017, 13 students enrolled for the Art & Archaeology Contemporary Theory and Practice course. Designed and led by the University of the Highlands and Islands Archaeology Institute and the Department of Art and Design at Orkney College UHI, this exciting and innovative course is a distance learning course and incorporates a four day residential workshop held in the unique location of Orkney, Scotland. It is a 20 credit SCQF Level 11 module which appeals to those who have studied archaeology, art history, fine art or related subjects at undergraduate level. This popular course is also planned to return in 2018.



© Helen Garbett

Art Fieldwork in Stromness

"Thank you @OrkneyCollege @UHI Archaeology for 3 inspiring art and archaeology days. Bursting with ideas now." Helen via [Twitter](#).

Art & Archaeology Workshop

NESS 22EM

This workshop will explore the synergies between Art and Archaeology through an exciting combination of field visits and studio time. Accompanied by artists and archaeologists, you will explore themes of mark-making, materiality, and landscape in the beautiful setting of Orkney's West Mainland. There will be exclusive tours of the Ness of Brodgar, Pier Arts Centre, and Ness Battery, as well as expert printmaking tuition.

The University of the Highlands and Islands Archaeology Institute teamed up with Orkney College Art Department to offer a summer Art and Archaeology workshop.

The workshop attracted eleven students who visited both the Ness of Brodgar and Ness Battery to gain inspiration for the intensive workshops.

Excellence in Historic Environment Services

Orkney Research Centre for Archaeology (ORCA) offers both terrestrial and marine historic environment services to a range of clients from the renewable energy, electricity transmission, oil and gas sectors in addition to infrastructure developers and legislative bodies to provide historic environment solutions and consultancy. Meeting the challenges of the historic environment market, ORCA is expanding services geographically by increasing business on the mainland of Scotland.

Commercial Archaeology Projects



Geophysics at Kergord

Kergord Converter Station, Shetland. ORCA was commissioned by Balfour Beatty Construction Services UK to undertake a scheme of archaeological excavations at Upper Kergord, Shetland, in advance of the development of a proposed electricity converter station.

The fieldwork focused on four excavation areas targeted over features identified through walkover survey, desk based assessment and during watching briefs of geotechnical works. The excavation encountered features that represent elements of the Post Medieval/crofting period landscape, including a shieling-type shelter, as well as structural remains which were potentially associated with earlier activity on the site. The excavations provided evidence for Neolithic or Bronze Age land management.



Recovering the Pictish Cross Slab

Pictish Orkney Cross Slab.

ORCA was commissioned by HES to undertake a small excavation to recover a carved Pictish Cross stone found by a member of ORCA staff while out for a walk at Newark, Orkney.

The carved stone was found to be within the

previous excavations of an early medieval chapel site, but it is highly probable that it originated from the immediate vicinity of the known medieval chapel. It is a very important addition to the corpus of Pictish symbol stones in Orkney and in Scotland as a whole. This artefact has parallels with the Pictish cross slab found in 2011 from Appiehouse in Sanday. This Pictish cross slab is only the second 'reasonably intact' example discovered in Orkney to date. The cross slab is of international importance.

Commercial Archaeology Projects



Neolithic & Iron Age Remains

Scapa Health Centre, Kirkwall, Orkney.

Geophysics was used to target trenches across the site which uncovered significant Neolithic and Iron Age remains. Following advice from ORCA, the Orkney NHS team amended the site plan of the Health Centre to avoid the significant archaeology, meaning that the important infrastructure development work could continue unimpeded.

An archaeological watching brief was undertaken as the civil engineering works

progressed, on behalf of NHS Orkney, across the site in Kirkwall. During the watching brief a number of linear features, interpreted as post-medieval land drains and boundary ditches were identified. Also identified was the edge of a former quarry pit that was shown on the First Edition 6-inch Ordnance Survey map.



Knap of Howar

North Isles Landscape Partnership Scheme. Orkney Islands Council commissioned ORCA to provide a Historic Environment Study, as part of the Heritage Lottery-funded North Isles Landscape Partnership Scheme (NILPS).

The study presented an overview of the heritage assets of the North Isles within a chronological summary, and the findings from a programme of field survey to assess the condition and significance of the heritage resource of the North Isles, Orkney. The baseline study comprised a desk-based review of existing information about the sites of the North Isles, namely Rousay, Egilsay, Wyre, Gairsay, Westray, Papa Westray, Holm of Papa Westray, Sanday, Stronsay and North Ronaldsay.

The review identified a total of 2,242 terrestrial and 831 maritime sites across the North Isles, derived from Historic Environment Record data. A number of previously unknown sites were also recorded and assessed. A series of isles-wide projects have been drawn out from this review and in consultation with Local Development Trusts; these involve the North Isles' communities at the core of their design. Several smaller-scale projects are also identified in response to feedback from individual Isles' interests involving various aspects of their cultural heritage.

Commercial Archaeology Projects

Orkney is located in a strategic position and together with the unique natural characteristics of Scapa Flow has offered protection for vessels for the last three hundred years.

The islands were especially important in both world wars as a naval base for the Royal Navy. Scapa Flow was the location of the scuttling of the German High Seas Fleet during World War I, and as such has become one of the best sites for wreck-diving in the world.

ORCA has developed a strong working relationship with local diving groups and uses the latest subsea surveying technology to create a focus for research.



Surveying a cannon from the Utrecht wreck

Surveying The Utrecht The project was completed in collaboration with Kevin Heath at SULA Diving and aimed to complete magnetometry surveys and underwater diver survey to the east and west of the Holms of Ire to map the site of the wreck of the Dutch frigate *Utrecht*, lost off Sanday in 1807.

Orkney has a rich submerged maritime resource that brings in substantial economic revenue to the islands through diving tourism each year. The successful identification of the site will allow for the development and promotion of the site of *The Utrecht*, and the maritime archaeology of Sanday and Orkney's North Isles. The story was featured on STV News and the local press.





Royal Oak Pinnacle Compass

Shiptime Maritime Archaeology Project This major project was a collaborative maritime archaeology project surveying shipwrecks of the German High Seas Fleet and the war graves HMS Hampshire, HMS Vanguard and HMS Royal Oak.

The survey used a suite of geophysical equipment, ROV and diver survey to collect data that will accurately record the wrecks as they sit on the seafloor today. The data collected will be used to continue to monitor, protect, conserve and promote these impressive ship wrecks. Visualisations of the wrecks by the University of Dundee 3D Visualisation Research Lab (3DVisLab) will bring the wrecks to life as the latest technologies are used to create these models. The project was also used in a Historic Environment Scotland blog post explaining how HES is assessing marine heritage in Scotland.

It is planned that the project will contribute to the centenary commemorations of the scuttling of the German High Seas Fleet in 2019.

'Stunning Image of Fleet Vessels Sunk in Scapa Flow'
Herald Scotland

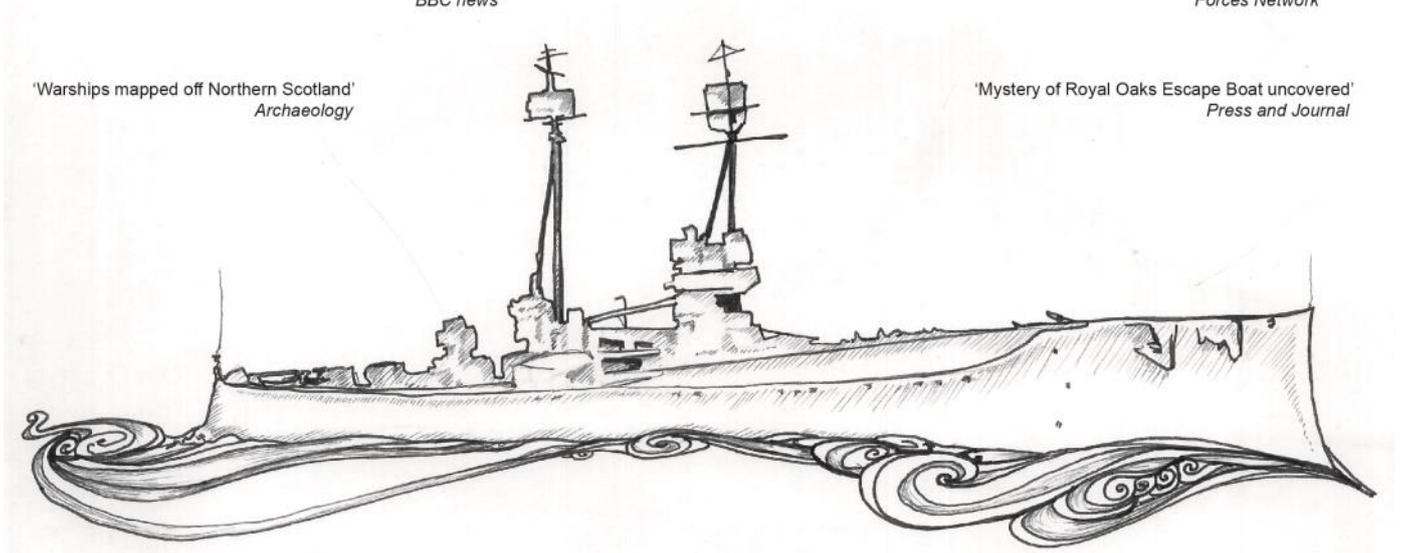
'Major WW1 Shipwreck Survey off Orkney gets underway'
The Scotsman

'First echosound images of Scapa Flow Battleship wreck'
BBC news

'Sunken First World War Destroyer Discovered after 100 Years'
Forces Network

'Warships mapped off Northern Scotland'
Archaeology

'Mystery of Royal Oaks Escape Boat uncovered'
Press and Journal



COMMUNITY AND LIFELONG LEARNING

Community Archaeology Projects

Community engagement is embedded into all of the research work undertaken by UHI Archaeology Institute and this year the number of people involved from the community has once again increased substantially. Dan Lee, Lifelong Learning and Outreach Archaeologist has been instrumental in working with a wide range of community groups to help develop schemes and secure funding for projects that are designed by local communities for local communities.



Mapping Magnus Project

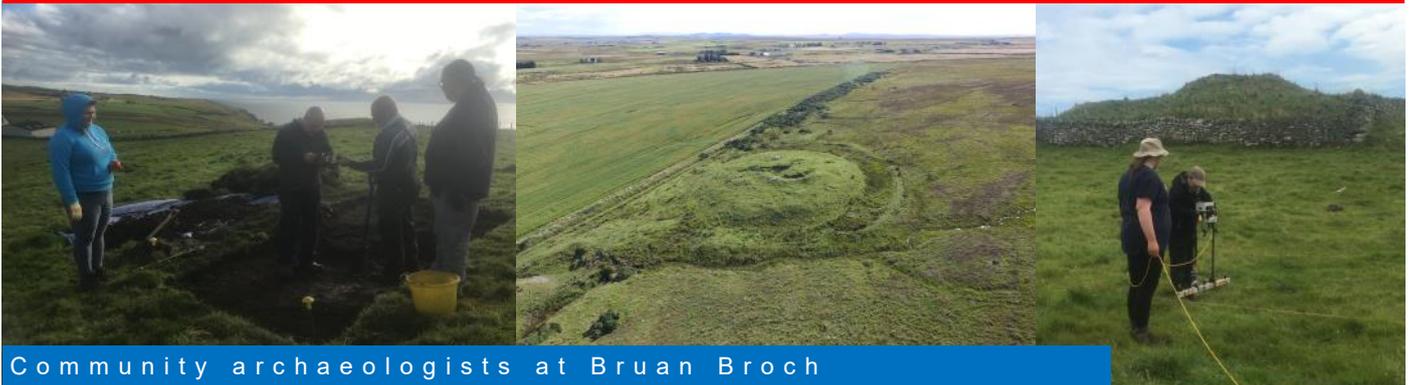
Mapping Magnus The project is a major community archaeology programme, run by Dan Lee and Dr Sarah Jane Gibbon, forming part of the Heritage Lottery Funded 'Magnus 900' project. Commemorating the 900th anniversary year of the death of St Magnus the project provided hands-on training for new and existing archaeology and heritage interest groups, schools and individuals in Orkney. Key themes such as 'Movement & Pilgrimage', 'Religion & Power', 'Stones & Bones', were explored, with an emphasis on hands-on archaeological research and fieldwork experiences for the local community.

Over 52 people took part in the full programme of activities which included geophysical surveys, building recording, walkover survey, measured survey, guided walks, and the highlight - excavation in and around the Palace Village area of Birsay. The latter involved both local residents and school children in the search for the lost Medieval Bishop's Palace. More than 120 children from five West Mainland primary schools took part in hands-on activities on the site following class-based introduction sessions.

A 'Mapping Magnus' blog was created within the UHI Archaeology Orkney blog (over **12,500** views worldwide during the period of the project). The reach was truly **worldwide** with significant viewings from the USA, Canada, Australia and New Zealand. We even had a few viewers in China for this project! Over **100,000** people viewed the Archaeology Orkney blog itself this year. The UHI Archaeology Facebook page reached **76,913** people during the period of the project, 3D models reached over **5,000 people** and a series of Video clips of the dig's progress reached over **12,500 people**.

COMMUNITY AND LIFELONG LEARNING

Community Archaeology Projects



Community archaeologists at Bruan Broch

Caithness Broch Festival The University of the Highlands and Islands Archaeology Institute teamed up with the Caithness Broch Project to bring together a Festival of Archaeology – funded as part of Scotland’s Year of History, Heritage and Archaeology, by the Heritage Lottery Fund.



The festival provided a programme of heritage and archaeology projects for 2017, focused on exploring the broch sites of Caithness. The overall aim of the festival was to develop a skilled and engaged group that can develop and sustain archaeological projects within the county. Participants will also contribute to the wider understanding of broch sites in Caithness and will contribute to an exhibition at Caithness Horizons Museum.

Our work with the Festival provided opportunities for local people and visitors to the area to engage with local archaeology. Staff from ORCA designed and organised two community projects at two sites in Caithness. Local people and visitors together with local school children were engaged in geophysics and excavation training events at Bruan Broch and Thing’s Va sites, and further workshops were undertaken by Dan Lee, with local primary and secondary schools.



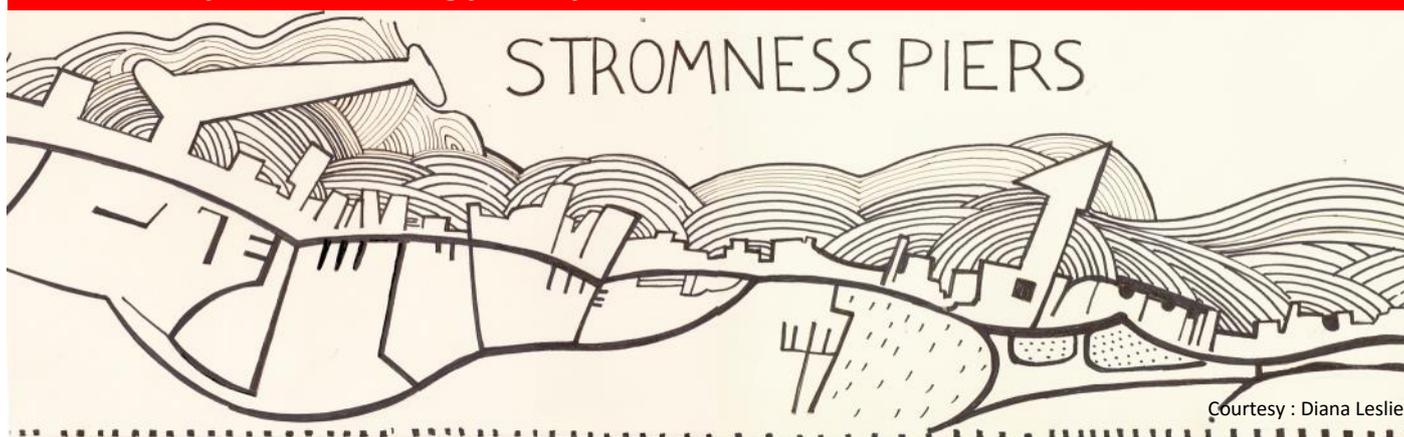
Aerial view of Bruan Broch

Thanks to Bobby Friel

“I came to visit the site late Sunday afternoon and was pleased to see how much work had been done. Well done to all.” Adam Smith, Volunteer Community Archaeologist (Thurso)

COMMUNITY AND LIFELONG LEARNING

Community Archaeology Projects



Listening to the Piers – Exploring the history of Stromness through the town piers. This innovative project was led by Stromness Museum in partnership with the University of the Highlands and Islands Archaeology Institute. Arts and science workshops for the public and local schools were aimed at exploring the history of Stromness through the town piers.

Involving archaeologists, local artists, and marine scientists from the Heriot-Watt University Orkney Campus, the project gave the local community an opportunity to learn about life on and around the town's stone-built piers, past and present. The events formed part of the 'Per Mare' week during 2017 when Stromness celebrated the 200-year anniversary of becoming a Burgh of Barony (then called 'Stromness Per Mare').

The project provided a chance for all ages to explore different ways of seeing and interpreting the piers using innovative science and arts workshops held on a 'Piers Day' during the Per Mare week.

Specifically, the project team worked with local school children and residents to record stories, memories and the history of the piers during May and June 2017. Workshops on 'Piers Day' included archaeological test pit excavation on the town beaches to explore what the town threw away, drawing, photography (artefacts and sea life) and underwater filming to investigate sea life in the piers and intertidal zone. Participants learned new science and arts-based skills and helped create new insights into the piers. These events were free and open to all ages.

The project culminated in a winter exhibition at the Stromness Museum including artefacts, drawings, photographs and a new listening post with stories collected during sound recording workshops. The

project was supported through a collaborative marketing campaign with Stromness Museum which resulted in features in local press and BBC Radio in Orkney.



Community involvement in and around Stromness Museum

WORKING WITH THE COMMUNITY

Community Groups Involved in UHI Projects

We would like to thank the following local community groups who have worked with us this year.

- ◇ Birsay Heritage Trust
- ◇ Orkney Archaeology Society
- ◇ Orkney College
- ◇ Orkney Islands Council
- ◇ Kirkwall Grammar School
- ◇ Glaitness Primary School
- ◇ Papa Westray Community
- ◇ The Hope Community School
- ◇ Stenness Community Trust
- ◇ West Mainland Daycare Centre
- ◇ The Blide Trust
- ◇ Ness of Brodgar Trust
- ◇ The Ness Battery
- ◇ Voluntary Action Orkney
- ◇ Shetland Amenity Trust
- ◇ Caithness Broch Project



Rousay Community School 'Rousay, Egilsay & Wyre Land & Sea: Exploring Island Heritage, Past & Present' workshop - a collaboration between UHI & HES (Piers Dixon pictured on the left)

Local links to heritage and community groups in Orkney, Shetland, Mainland Scotland and the Western Isles have been strengthened through a series of 'ground-up' initiatives. Our philosophy has always been inclusive and during 2016-17 the UHI Archaeology Institute has developed a strong base through which to effectively help train local communities to understand and develop links with their heritage.

The involvement of community groups and schools has been embedded into all archaeological project designs this year and the results have been spectacular in terms of engagement. The Institute link with Orkney Archaeology Society has been strengthened this year through both collaborative marketing activity and financial support for archaeological projects. Other local links with Orkney.com, NorthLink Ferries and local media outlets has resulted in sharing of marketing initiatives across social media in support of Orkney as a future destination generally.

The model of engagement adopted by the UHI Archaeology Institute and how it contributes to the tourism industry has been recognised in the ***Economic and Social Development Consultancy Ekos report into Archaeology in the Outer Hebrides (Chapter 4 Actions to Achieve Growth***, commissioned by Comhairle nan Eilean Siar, August 2017) as a way forward for other island communities who wish to attract tourists to their area.

COLLABORATIONS

International

Professor Jane Downes & Julie Gibson's research highlights the dangers of climate change to important archaeological sites in Orkney and Easter Island and was acknowledged in the '*UNESCO World Heritage and Tourism in a Changing Climate*' report.

It is well known that climate change will have a dramatic impact on the economy across the planet and that island communities are particularly at risk. It is perhaps less well known that tourism is the largest industry in the world and that archaeological sites have a large part to play in attracting tourists and contributing to the overall economy of many areas. This report, published by The Union of Concerned Scientists for UNESCO, underlines these concerns and how climate change impacts upon specific World Heritage sites. <https://archaeologyorkney.com/2016/06/02/the-impact-of-climate-change-and-archaeological-heritage/>

Professor Jane Downes' research blog on Rapa Nui reports on the increasing damage to archaeological monuments due to sea level rise and coastal erosion. Text by Professor Jane Downes (University of the Highlands and Islands) and Professor Kate Welham (Bournemouth University), photographs by Adam Stanford (Aerial-Cam). Research visits to Rapa Nui undertaken as part of the Arts and Humanities Council (AHC)-funded 'Rapa Nui – Landscapes of Construction' project have afforded the opportunity to generate these observations. <https://archaeologyorkney.com/2017/05/04/coastal-erosion-in-rapa-nui-easter-island/>

The Swandro site was featured in **The Union for Concerned Scientists Yale Environment 360 publication** as an example of a site threatened by rising sea levels.



Ongoing links with Willamette University continue to be strengthened, with a group studying at the Ness of Brodgar with Professor Scott Pike. An active UHI student exchange programme has resulted in students from UHI Archaeology Institute studying at Trent University, Ontario, Canada and students from Canada travelling to Orkney in order to continue their studies at archaeological sites in Scotland.



Ahu Naunau, Easter Island

Adam Stanford

COLLABORATIONS

National



© Historic Environment Scotland

The Historic Environment Scotland Board at Skara Brae

National links have been further strengthened in 2017 with projects completed in collaboration with Historic Environment Scotland, Marine Scotland and the Ministry of Defence.

The Shiptime Maritime Archaeology Project, led by ORCA (Orkney Research Centre for Archaeology), University of the Highlands and Islands Archaeology Institute and SULA Diving, brought together universities, commercial companies and government bodies including Historic Environment Scotland, Marine Scotland, Ulster University, Heriot-Watt University, University of Dundee, and Seatronics – an Acteon company. See page 21 for a full description of the project.

Further project work with Heritage Lottery funding is progressing on the Mapping Magnus project, and with CITiZAN (Coastal and the Intertidal Zone Archaeology Network) on developing community outreach projects on the Pett Levels on the South Coast of England.

In October 2017 the Historic Environment Scotland Board visited Orkney and spent the day with Professor Jane Downes and Nick Card discussing heritage development plans for Orkney. A video of the visit can be viewed online at <https://www.youtube.com/watch?v=-E1xTYVnknk>

SCOTLAND'S
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WORKING WITH BUSINESS

Ola Gorie Jewellery



Ola Gorie Brooch

The UHI Archaeology Institute worked with Ola Gorie MBE, one of Scotland's leading designer-makers of gold, silver and platinum jewellery, to develop the Ness of Brodgar jewellery range.

Ola's home is located close to the Ness of Brodgar and using the inspiration of the site her company developed and marketed a stunning range of jewellery, including a brooch, four styles of earrings

and seven styles of pendant. Each item was based on the artwork unearthed at the Ness of Brodgar by Site Director Nick Card and his team.

Kirsteen Stewart - The Wander Collection



© Kirsteen Stewart

Orkadian designer Kirsteen Stewart began working with Lifelong Learning & Outreach Archaeologist Dan Lee in 2016 using GPS mapping equipment to track favourite coastal walks and well-trodden routes throughout Orkney. Finding connections in their approaches, Dan and Kirsteen decided to develop a new creative process which combined aspects of archaeological landscape survey and walking, with their references to place, material and time.

These were transformed into new forms of digital maps which formed the design basis for a new range of clothing and accessories. Dan has recently been exploring the potential for experimental mappings in archaeology and has developed new innovative ways of combining walks, performance and landscape using handheld GPS (Global Positioning System) and Geographical Information Systems (GIS).

Together, they decided to push the archaeological map and design process in new directions. These mappings created line drawings, which Kirsteen then shaped and combined with elemental colour palettes to create a range of fabrics to use in collections of clothing and accessories.

Designer Kirsteen Stewart currently stocks her products in the UK, Europe and Japan.

WORKING WITH BUSINESS

Ortak Jewellery



The Cairns Range of Jewellery

© ORTAK

Following Ben Price's MSc research into the creation of a 3D replica of an Iron Age pin from moulds found at The Cairns (refer to Issue One of our Annual Review), in late 2016 the bronze pin was put on sale for a limited time to see if there was interest in the pin as a product, in association with the Orkney Archaeology Society. The response was very positive and in the spring of 2017 Orkney jeweller Ortak developed 'The Cairns Pin' range from the 3D model of the original mould.

Ortak constructed the pins in silver which is an archaeologically viable casting medium for this kind of artefact in the Iron Age. The range includes the original reconstruction pin as well as derived forms including wearable items such as necklaces, earrings and brooches.



The Original Mould

The Cairns Pin

© UHI Archaeology Institute

CONFERENCES AND WORKSHOPS

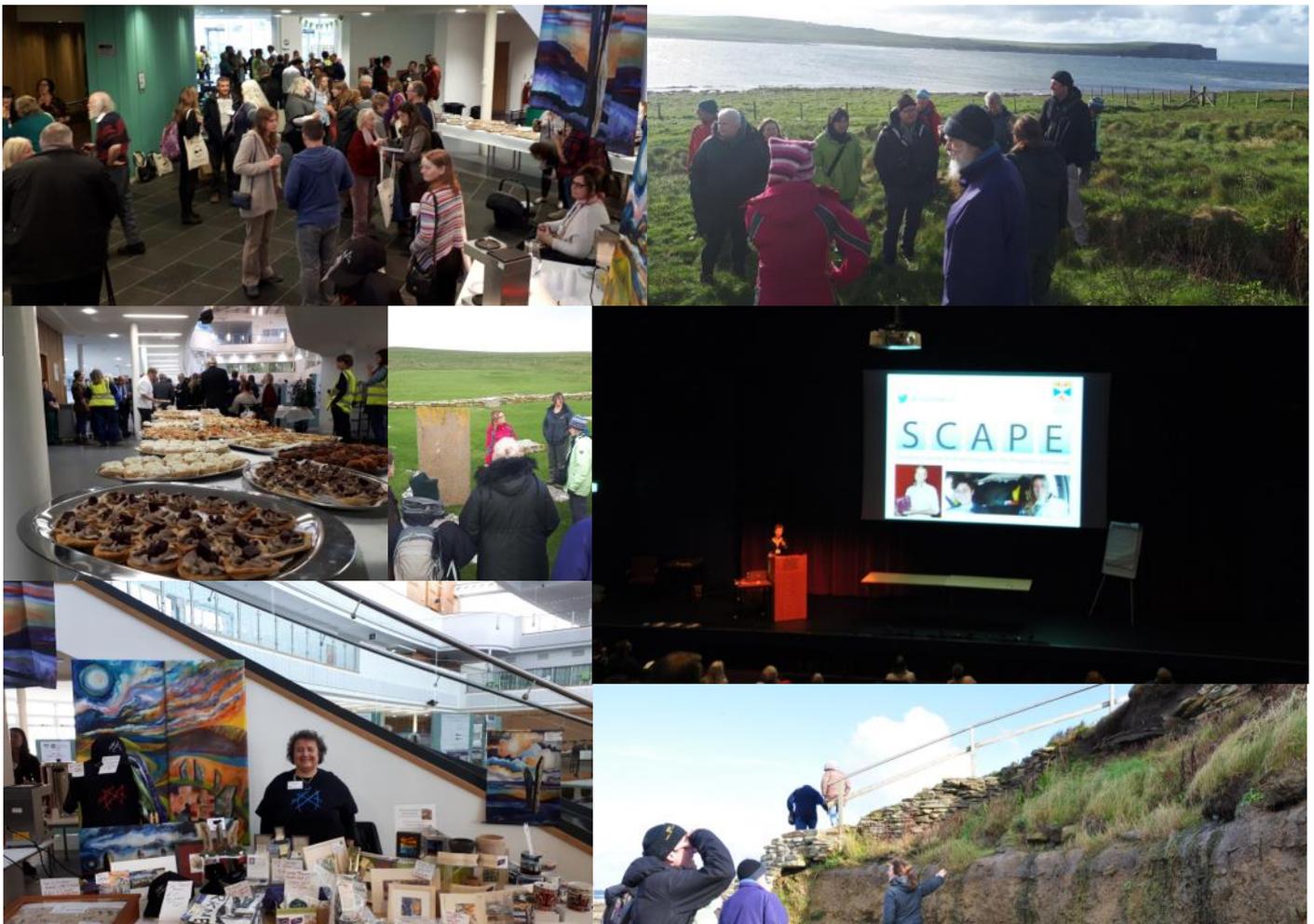
Our Islands, Our Past UHI Archaeology Conference

The inaugural University of the Highlands and Islands Archaeology Institute conference was a great success with over 100 delegates from around the world attending. The theme was 'Our Islands, Our Past' with derived sub-themes including:

- ◇ Identity and Culture
- ◇ Sustainability and Conservation
- ◇ Migration and Abandonment
- ◇ Connectivity and Travel
- ◇ Island Culture and Place

The conference itself formed part of the celebrations of the Scottish Year of History, Heritage and Archaeology, and presented an opportunity to think about the future of the Islands' archaeology and heritage. A roundtable discussion at the conference also led to the development of a project to create a Regional Research Framework for the Three Island Council areas of Orkney, Shetland and the Western Isles.

Supported by Orkney College UHI, Orkney Islands Council, Comhairle nan Eilean Siar, Shetland Amenity Trust, Historic Environment Scotland and ScARF, the conference was aimed at everyone interested in the distinct islands' identities, archaeology, collective traits and traditions.



CONFERENCES AND WORKSHOPS

UHI Archaeology Student Conference

The University of the Highlands and Islands Student Archaeology Conference was held in the St Magnus Centre, Kirkwall on Friday 15th September 2017. This conference was designed to give Archaeology students an opportunity to present research, which has been undertaken as part of their studies, to a wider audience.

Over 40 undergraduate and postgraduate students attended the conference which included presentations, posters and roundtable discussion sessions for students to promote themselves and their work. Attendees also had the opportunity to take part in interactive talks on the overall undergraduate archaeology programme and with archaeological professionals, including GUARD Archaeology, ScARF and the Stefansson Arctic Institution on future employment prospects.

A presentation by UHI Archaeology Institute student Kath Page was cited by Orkney Islands Council's Development and Marine Planning Manager, Stuart West, as a model of how archaeology students develop skills that can be employed in urban planning.

Ness to Ness Art & Archaeology Workshop

The University of the Highlands and Islands Archaeology Institute teamed up with Orkney College Art Department to offer a summer Art and Archaeology workshop from 17th-20th August 2017. The successful and enjoyable course involved the delegates in a bespoke tour of the Ness of Brodgar site with site Director Nick Card, and Neolithic art specialist Dr Antonia Thomas, giving an insight into the Ness' unique art. In the afternoon, the team explored the remarkable buildings at the Ness Battery and its unique WWII painted murals with archaeologists Andrew Hollinrake and Dan Lee.

The workshop continued with designer Kirsteen Stewart working with delegates in the art studios at Orkney College UHI in Kirkwall. Inspired by the previous field days, delegates developed their creative ideas through the medium of print with world-renowned printmaker Charles Shearer.

Delegates were also given the opportunity to work with the Pier Arts Centre and its world-class collection of British Modernist paintings and sculpture, in a workshop led by the Centre's Education Officer and artist Carol Dunbar.



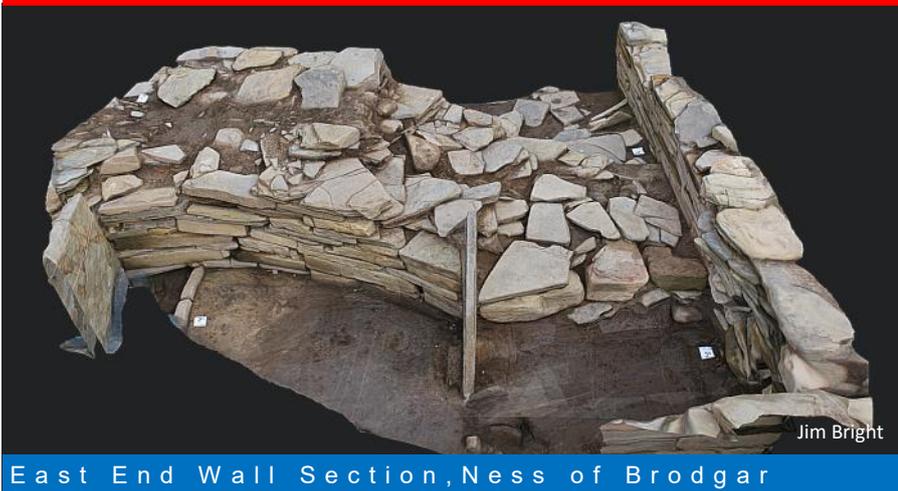
Workshop at the Ness Battery

DIGITAL HERITAGE

Virtual Laboratory

Our continued development of the innovative virtual laboratory, with the UHI Education Development Unit, enables us to use cutting-edge technology to enhance teaching across the network. Through Archaeology Institute funding, students now have access to a state of the art polarising (petrographic) microscope system, with digital camera and imaging technology, which will improve the quality of the student lab experience across UHI.

3D Computer Modelling



One of the new technologies being used on site is 3D computer modelling. Throughout the excavation season Jim Bright, one of our MSc students, has been developing his skills in this domain. These are not just aesthetically pleasing models of the features and artefacts but are a useful tool for both interpreting and disseminating data.

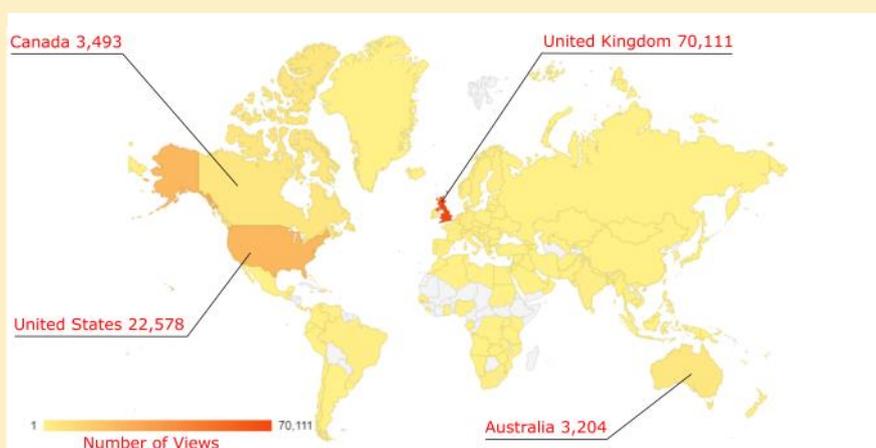
East End Wall Section, Ness of Brodgar

The 3D models that Jim created at The Cairns excavations were disseminated to the public and can be used as an addition to the archaeological paper record of trenches.

The data captured at the Ness of Brodgar was recorded using a total station theodolite (an electronic/optical instrument used for surveying and building construction). The user can accurately measure the 3D model down to the nearest millimetre, giving Nick Card and his supervisors a feasible supplement to traditional archaeological recording methods at the Ness of Brodgar Excavations this year.

Dr Hugo Anderson-Whymark continues to produce 3D models of the whole sites at The Cairns, Tresness, Cata Sand, and sections of trenches at the Ness of Brodgar. These models allow preservation by recording features, allowing future interrogation of the different aspects of the excavations.

UHI Archaeology Institute Blog Reach 2016-17



The UHI Archaeology Orkney blog continues to develop and has created a digital presence of its own. The blog has over **250** posts and is an easily accessible **digital record** of the Institute's work. Within the last year over **100,000** people have read the posts and the blog itself has been recognised as one of the **Top 25** Archaeology blogs in the world (Source: Feedspot). A blog has recently been added to the ORCA

website to address our commercial clients. The launch was very successful with the latest blog post detailing work on the A9 being added to by Keith Brown **Cabinet Secretary for Economy, Jobs and Fair Work**.

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