

Institution: University of the Highlands and Islands
Unit of Assessment:UoA17
Title of case study: <i>The Heart of Neolithic Orkney World Heritage Site</i>
<p>1. Summary of the impact (indicative maximum 100 words)</p> <p>Archaeological survey and excavation focussed on the ‘Heart of Neolithic Orkney’ World Heritage Site (WHS) have had beneficial impacts on the historic environment. The landscape approach of the research has had a local impact on planning policy, contributing to preservation and interpretation of the historic environment, and a global impact in application of the research approaches to other World Heritage Sites. Extensive public engagement in the research has enhanced cultural understandings of the past/Neolithic and of archaeological heritage management issues and made a significant contribution to sustainable economic development in Orkney, increasing tourism around archaeology and supporting local businesses.</p>
<p>2. Underpinning research (indicative maximum 500 words)</p> <p>The overall aims of the research group led by Prof. Downes in the Heart of Neolithic Orkney World Heritage Site (HONOWHS) research programme sought to:</p> <ol style="list-style-type: none"> <i>1. Understand the chronological and spatial context of the WHS, through a landscape approach</i> To explore the landscape of the HONOWHS, and to provide information for management of the Site and its surroundings, an extensive programme of geophysical survey was undertaken encompassing the Inner Buffer Zone of the WHS. This was one of most extensive surveys of its kind, providing further detail of the WHS and other known sites and revealing a palimpsest of previously unknown sites. This research has provided a spatial and temporal context for the Neolithic WHS monuments (O4), adding to our understanding of social and environmental change as well as providing a tool for management of the WHS (O5). <i>2. Improve our understanding of the WHS Neolithic monuments, in Orkney and a Neolithic world context, through excavation</i> To research more intensively the WHS Neolithic monuments, excavations were initiated: the excavation (since 2007) of the Ness of Brodgar, a hitherto unknown Neolithic walled complex of monumental stone buildings; and at the Ring of Brodgar henge monument and stone circle in 2008. Attributing a date of mid-third millennium BC to the previously undated Ring of Brodgar elucidates the chronology of the HONOWHS, and improves understandings of henge monuments in Britain (O2). The grandeur and complexity of the Ness of Brodgar buildings and material culture challenge our understandings of Neolithic society as a whole, in particular in terms of ‘monumentality’ and the spread of farming in Northern Europe (O1, O3). <i>3. Explore the dialectic between Art and Archaeology (cross-discipline engagement)</i> The HONOWHS research includes the research strand ‘Art and Archaeology’ as part of widening engagement. In collaboration with The Pier Art Centre (PAC), with artists in residence at the Ness of Brodgar, and exhibitions at the PAC amongst other events, this research strand interplays and interpolates archaeologists’ and artists’ responses to, and interpretations of, the findings from the survey and the sites and landscape (O3). <p>The body of research was initiated in 2001, led by Downes with Card, and Mainland (from 2009). The geophysical survey forming part of the research was led by Ovenden who was in post in UHI until 2011. The Ring of Brodgar excavation in 2008 was co-directed by Downes and Prof C Richards (Manchester University). The Ness of Brodgar excavation, ongoing since 2007, is directed by Card.</p>

3. References to the research (indicative maximum of six references)

- O1 **Mainland, I., Card, N.,** Saunders, M.K., Isaksen, L., Webster, C., **Downes, J.** and Littlewood, M. 2013 ‘SmartFauna’: a microscale GIS-based multi-dimensional approach to faunal deposition at the Ness of Brodgar, Orkney’ *Journal of Archaeological Science*
- O2 **Downes, J.** and Richards, C. 2013 ‘Investigating the great Ring of Brodgar, Orkney’ in C. Richards *Building the Great Stone Circles of the North*. Oxford: Windgather Press.
- O3 **Card N.,** and Thomas A. 2012 ‘Painting a picture of Neolithic Orkney: decorated stonework from the Ness of Brodgar’ in A Cochrane and A M Jones (eds) *Visualising the Neolithic*. Neolithic Studies Group Seminar Papers 13, 111-124. Oxford: Oxbow
- O4 **Card N., Downes J.,** Cluett, J., Gater J. & Ovenden, S 2007a ‘Bringing a landscape to life? – researching and managing the ‘The Heart of Neolithic Orkney’ World Heritage Site’ in Cooney, G. (ed) *The Archaeology Of World Heritage* World Archaeology Vol. 39 No. 3
- O5 **Card, N.,** Cluett, J., **Downes J.,** Gater J.& Ovenden S. 2007b ‘The Heart of Neolithic Orkney World Heritage Site – building a landscape...’ in Larsson, M. and Parker Pearson M. (eds) *From the Baltic to Stonehenge: living with Cultural Diversity in the Third Millennium BC* British Archaeological Reports
- O6 **Downes J.,** Foster S.M. and Wickham Jones C.R. 2005 *The Heart of Neolithic Orkney World Heritage Site. Research Agenda*. Edinburgh: Historic Scotland (includes contributions from **Card** and **Mainland**)

Key Grants

Historic Scotland, Orkney Islands Council, 2001-4 World Heritage Research Agenda, total £16,869

Historic Scotland, 2002, 2003, 2008, 2010, 2012, WHS Geophysical survey, total £82,295

Historic Scotland, 2008, 2009, 2010, Ring of Brodgar excavation and post excavation, total £39,523

AHRC, 2010, PhD studentship A Thomas ‘Inscription as Social Practice’, total c. £52,500

Leader, 2010, ‘Archaeology and Sustainable Development’, £24,750.00

British Academy, 2011, ‘SmartFauna’, £7,385.00

Scotland’s Islands Flagship Fund, Creative Scotland and the Calouste Gulbenkian (with Pier Art Centre) 2011, ‘Symbols in the Landscape: Art and Archaeology in Orkney’s World Heritage Site’, £25,000

Evidence of the quality of the research:

O1 and O4 are articles in peer-reviewed international journals; O2, O3 and O5 are peer-reviewed book chapters; O4, O5 and O6 were submitted to the 2008 RAE; O6 has been consulted extensively on the internet and has informed the development of other research agenda.

4. Details of the impact (indicative maximum 750 words)

The research of the team has contributed to **changing conservation and resource management practice and policy**. The HONOWHS Research Agenda (O6), initiated by Downes, was one of the first produced for a WHS; it informed the research strategy at the WHS and is implemented in parallel with the Historic Scotland WHS Management Plan.

The HONOWHS Research Agenda has been disseminated widely (available on the internet since 2005), has served as a model for subsequent Research Agendas (eg. Brú na Bóinne (E1) and informed the Historic Scotland WHS Management Plan 2008-2013 (E2). The use of archaeological research as a tool for sustainable development in a WHS context is applicable worldwide, as demonstrated by Downes’ advisory role in this respect at Euracademy’s 6th Summer Academy ‘Culture and Sustainable Rural Development’ Crete (2007), in consultancy in Vega Islands WHS, Norway (2009) and for Corporación Nacional Forestal de Chile on Easter Island WHS. The emphasis on a WHS landscape approach has had a significant impact through, e.g. the geophysical survey which provided a planning tool for WHS site and landscape management, beneficiaries being Orkney Isles Council (OIC) and Historic Scotland (HS). WHS research was

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important in the revision of the WHS buffer zones and fed into the OIC Supplementary Planning Guidelines (2010) (E3).

The research impact of fieldwork in the WHS area has been intensive locally and extensive internationally due to a major focus on **public engagement**. Users and beneficiaries include: community organisations (e.g. Orkney Archaeology Society); Orkney community (schools, college, businesses); communities of interest world-wide (tourists, members of the public interested in archaeology); universities (students and researchers, particularly from UK and North America).

The media have covered the research extensively in numerous local, national, international, specialist and non- specialist archaeology items. The reach of the research is worldwide, with the Ness of Brodgar excavation having the most tangible and greatest impact. Since July 2011, the web pages dedicated to the Ness of Brodgar excavation diary hosted on the Orkneyjar website (E4) have attracted over 180,000 visits. This website is also a reliable measure of the effect of a BBC2 programme on Ness of Brodgar 'Orkney's Stone Age Temple, A History of Ancient Britain Special', first broadcast on 1/1/2012 (c. 3 million viewers), with repeats on 5/08/2012 and 17/02/2013, shown on Special Broadcasting Service, Australia July 2012 and New Zealand television, October 2012. Peaks of visits to the website occurred after the BBC2 screening in January 2012, with over 2,000 visits in the first hour after the programme and c. 6,000 hits in the first day (E5). An interview with Card on 20th February 2013 on Public Broadcasting Service (PBS) of America Newshour, screened across the USA, was watched by c. 3 million viewers; the PBS website had a further 22,900 views of the programme in the first week, plus c.2,500 views on YouTube. The programme contributed to the busiest day on Orkneyjar.com's Ness of Brodgar pages with 6,327 hits (11,780 hits in the week after the broadcast). During the six-week excavation season at the Ness of Brodgar in 2011, there were c. 32,700 visits to the Orkneyjar website, increasing to 44,570 in 2012 and 70,000 in 2013. Media coverage has also had the impact of increasing visitor numbers to the Ness of Brodgar, which rose markedly from 5,750 in 2011 to 7,600 in 2012.

Evidence of the impact of this public engagement are the several hundreds of web sites in which the Ness of Brodgar features in discussion (source: Google). The excavations at the Ness and Ring of Brodgar have enhanced interpretation of the WHS, already featuring in guidebooks for Orkney e.g. Monuments of Orkney: A Visitors Guide (Historic Scotland 2012); The Heart of Neolithic Orkney Miniguide (Charles Tait 2013). The impact of public engagement and of the significance of the impact is furthermore apparent in the awards to the Ness of Brodgar excavation: 2008 runner up, International Andante Travel Archaeology Awards; 2009 recognised as one of the top discoveries in the world by the American Institute of Archaeology; 2011 *Current Archaeology* Research Project of the Year; 2012 winner, International Andante Travel Archaeology Award; 2013 nominee, International Educational Travel Community Award.

The WHS-focussed Art and Archaeology research strand has engendered new types of creativity and knowledge, as well as **engaging new audiences**. Collaboration between Pier Arts Centre (PAC) and Orkney College UHI – two workshops (15/01/2010 OC, 30/04/2010 at PAC), and a follow-up workshop on 28/01/2011 at PAC to accompany 'Test Trenches' exhibition at PAC brought archaeologists and artists together in knowledge exchange. This collaboration led to Scotland's Islands Flagship Fund project 'Symbols in the Landscape: Art and Archaeology in Orkney's World Heritage Site', funded a residency for Rik Hammond in 2012 at the Ness of Brodgar, and subsequent exhibition at the Pier Arts Centre 'Being and Remembering' 18/2-17/3/2012 (E6). Artist Philip Hughes drew inspiration from the WHS geophysical and topographic survey, creating a body of drawings and paintings exhibited widely including at the Francis Kyle Gallery, London 2010, and the PAC in June 2012, and featuring in a book 'Tracks' (*Tracks: walking the ancient landscapes of Britain* Thames and Hudson 2012) accompanied by a touring exhibition of UK.

The Orkney WHS research has made a significant **positive contribution to cultural, environmental and economic sustainability**. In the remote rural context of Orkney "[w]ith tourism one of Orkney's major industries the importance of excavations such as the Ness of

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Brodgar to the local economy cannot be overstated.” (Orkney Archaeology Tours) (E7). “*Tourism is vital to Orkney’s economy, and the publicity generated by the [Ness of Brodgar] excavation in both the national and international news media is extremely beneficial.*” (Orkney Tourist Guides Association). Several Orkney-based tour operators reported a large increase in enquiries and bookings, one reporting a 700% increase (from 30 to 250) in daily web page visits following the BBC2 broadcast in January 2012; another (Orkney Archaeology Tours) reporting 400% increase website hits following the February 2013 broadcast (E7). The VisitOrkney website recorded a 200% increase in visits in the first week after the BBC2 Ness of Brodgar broadcast in January 2012, and VisitOrkney is in “*no doubt the publicity generated by the Ness of Brodgar, with the BBC and other channels has raised the profile of Orkney as a destination and attracted additional visitors*” (E8). The impact of the research on the sustainability of Orkney is further affirmed by Highlands and Islands Enterprise: “*the tourism industry is extremely supportive of the work of the archaeology department, recognising its importance in bringing Orkney to the attention of a worldwide audience.*” (E9). Moreover, the significance of the Ness of Brodgar research and its impacts were highlighted in a motion proposed by Liam McArthur MSP in the Scottish Parliament, on 1 March 2011 “*That the Parliament notes that on-going excavations on the Ness of Brodgar...[have won several awards and]..believes that the complex uncovered by the excavations is further evidence of the rich archaeology of Orkney, both in the heart of Neolithic Orkney World Heritage Site and across the islands*” (E10).

5. Sources to corroborate the impact (indicative maximum of 10 references)

E1 www.heritagecouncil.ie/.../bru_na_boinne/Bru_na_Boinne_Full.pdf: Evidence of Downes’ involvement

E2 <http://www.historic-scotland.gov.uk/index/heritage/worldheritage/world-heritage-sites-in-scotland/neolithic-orkney.htm>: Evidence of impact of research on historic environment management

E3 Planning Manager, Orkney Islands Council: Statement to support the impact of the research on local government policy

E4 <http://www.orkneyjar.com/archaeology/nessofbrodgar/>: Evidence of public engagement

E5 Editor, The Orcadian, Kirkwall: Corroboration of website and local media impact through public and media response

E6 Director, Pier Arts Centre: Corroboration and detail of impact of art and Archaeology engagement.

E7 Business owner, Orkney Archaeology Tours: Statement to support claims about benefit to tour guide businesses

E8 Islands Manager, VisitScotland Orkney Office: Support of claims to increase tourism

E9 Head of Business Growth, Highlands & Islands Enterprise Orkney: Support of claims of research impact on sustainable development.

E10 Motion to Scottish Parliament by Liam McArthur Member of Scottish Parliament 01/03/2011