

<b>Institution:</b> Newcastle University		
<b>Unit of Assessment:</b> 15 Archaeology		
<b>Title of case study:</b> The Hadrian's Wall World Heritage Site: Generating Public Understanding and Engagement, and Supporting Management and Conservation		
<b>Period when the underpinning research was undertaken:</b> 2005-2020		
<b>Details of staff conducting the underpinning research from the submitting unit:</b>		
<b>Name(s):</b>	<b>Role(s) (e.g. job title):</b>	<b>Period(s) employed by submitting HEI:</b>
Ian Haynes	Professor of Archaeology	2007-present
Rob Collins	Lecturer/Senior Lecturer, Archaeology Post-Doctoral Research Associate Guest Member of Staff	2017-present 2013-2017 2009-2013
Lindsay Allason-Jones	Visiting Fellow Reader in Roman Material Culture Director of Archaeological Museums	2012-present 2009-2012 1988-2009
Sam Turner	Professor of Archaeology Lecturer/Senior Lecturer	2013-present 2004-2013
<b>Period when the claimed impact occurred:</b> 1 January 2014-31 December 2020		
<b>Is this case study continued from a case study submitted in 2014?</b> N		
<b>1. Summary of the impact</b>		
<p>Our impact falls into three mutually reinforcing categories. Since 2014 our research has:</p> <ol style="list-style-type: none"> <li>1. Enhanced public understanding of the Hadrian's Wall World Heritage Site (WHS), through the development of permanent and temporary displays at 5 major museums (combined annual visitor figures over 600,000 per annum) and a free online course 'Hadrian's Wall: Life on the Roman Frontier' developed with FutureLearn (reaching 64,563 registered users in 170 countries).</li> <li>2. Provided data feeding directly into decisions about the management of Scheduled Ancient Monuments and to inform land management discussions with local landowners based on our analysis of the WHS at 10 sites through non-intrusive surveys, excavation, standing building survey and conservation/repair.</li> <li>3. Democratised heritage practice by running training specifically for local communities, equipping them to contribute to WHS conservation. This work has included the National Lottery Heritage Fund 'Hadrian's Wall Community Archaeology Project' (WallCAP) and its 270 registered volunteers, at least 37 of whom were first engaged through our FutureLearn course.</li> </ol>		
<b>2. Underpinning research</b>		
<p>Research conducted by the Newcastle team has resulted in a thorough re-evaluation of the archaeology and history of Hadrian's Wall and the communities who have lived in its shadow. The work has led to new knowledge of the Wall zone's buildings, structures and landscapes, but also of the associated material culture and social practices.</p> <p>Allason-Jones' pioneering research, for example, explored the way that small finds and epigraphy could offer fresh insights into the lives of frontier communities. Her work pioneered an informed archaeological approach to the study of women's lives in an area previously dominated by male narratives and debates about soldiers and strategies (<b>PUB1</b>; Grant 6). Haynes, whose work has sought to refocus research on life in communities created directly and indirectly</p>		

through the Roman state, drove forward new work on ethnicity and identity amongst those who occupied the Wall zone. This was undertaken through studies of groups associated with units that garrisoned the Wall (**PUB2**) and through work on personal adornment in the frontier zone. In the latter case, this involved looking at the way that glass, created as a raw material far from the frontier, was refashioned into objects of adornment in the frontier zone (Grant 4). Collins initiated research into the longer history of the Wall, employing the close study of small finds alongside a reappraisal of structural archaeology to enrich understanding of those periods of Wall history that had consistently been neglected or indeed ignored, notably the late 3rd-5th centuries AD and after (**PUB3**; **PUB4**). Much of this work was brought together in the 'Summary of Excavation and Research' published in 2019 (**PUB5**).

The Newcastle team has undertaken research in several ways, including substantial excavations in extra-mural areas, large-area geophysical surveys of entire settlements, UAV surveys, overarching surveys of stone sourcing and monument building and digital 3D-capture. Crucially, all these research approaches have been tied to programmes that train and engage volunteers from outside the University sector. Large-scale excavations at Maryport directed by Haynes have revolutionised understandings of cult areas beyond the fort walls (**PUB6**; Grant 1). At Beckfoot and Corbridge (**PUB5**; Grant 3), extensive geophysical and UAV (drone) survey directed by Haynes (Grant 3), has extensively characterised the scale and organisation of two major settlement areas revealing a range of extra-mural spaces and cemeteries. On-going research by Collins as part of WallCAP (Grant 2; Grant 5) has conducted survey and excavation at 10 sites to date. Research and fieldwork by WallCAP is also directly linked to physical improvement of the fabric and condition of the monument, as well as improved knowledge of historic risks to the WHS.

### 3. References to the research

References to the research include the following peer-reviewed publications:

**PUB1: Allason-Jones, L.** *Women in Roman Britain*. York: Council for British Archaeology, 2005. [Available on request].

**PUB2: Haynes, I.P.** *Blood of the Provinces*. Oxford: Oxford University Press, 2013. DOI: 10.1093/acprof:oso/9780199655342.001.0001

**PUB3: Collins, R.** *Hadrian's Wall and the End of Empire: The Roman Frontier in the 4<sup>th</sup>-5<sup>th</sup> Centuries*. New York: Routledge, 2012. DOI: 10.4324/9780203114551

**PUB4: Collins, R. and Allason-Jones, L.** (ed.) *Finds from the Frontier: Material Culture in the 4<sup>th</sup>-5<sup>th</sup> Centuries*. York: Council for British Archaeology, 2010. DOI: 10.5284/1081724

**PUB5: Collins, R. and Symonds, M.** *Hadrian's Wall 2009-2019*. Kendal: Cumberland and Westmorland Architectural and Archaeological Society & Society of Antiquaries of Newcastle upon Tyne [includes contributions by **Haynes**]. [Available on request].

**PUB6: Haynes, I.P. and Wilmott, T.,** 2020. *A Cult Centre on Rome's North-West Frontier. Excavations at Maryport, Cumbria 1870 to 2015*. Kendal: Cumberland and Westmorland Architectural and Archaeological Society Research Report. [Available on request].

GRANT 1: Senhouse Museum Trust 'Maryport Roman Temples Project', (GBP306,000), 2011-20, Haynes (PI).

GRANT 2: National Lottery Heritage Fund 'Hadrian's Wall Community Archaeology Project (WallCAP)', HG-16-08924, (GBP1,300,000), 2017-21, Turner (PI), Collins (CI).

GRANT 3: JPI-CH Heritage Plus 'Cultural Heritage Through Time (CHT2)', AH/N504440/1, (AHRC contribution GBP152,000 of total EUR587,000), 2016-18, Haynes (CI), Turner (CI).

GRANT 4: European Commission Horizon 2020 'GlobalGlass', 657309, (GBP140,000), 2015-17, Haynes (PI).

GRANT 5: Historic England 'Written Rock of Gelt', 700064196, (GBP7,000), 2019, Haynes (PI).

GRANT 6: British Academy 'Analysing Britain's most elusive Roman sculptures', SRG18R1\180588, (GBP10,000), 2018-2021, Haynes (PI).

#### 4. Details of the impact

Our research impact falls into three mutually reinforcing categories and serves several overlapping groups of beneficiaries.

##### *1. Building public understanding of the Hadrian's Wall World Heritage Site (WHS)*

Most visitors who encounter the WHS do so via one or more of the museum displays located at sites along the length of the Wall. Since 2014 5 museums have incorporated our research into redesign of displays which receive over 600,000 visits a year. At Corbridge Roman Town our field survey results were incorporated into the new museum display, conveying information that the Curator described as 'fundamental to our interpretative approach in the museum and ... on site', while also noting that our laser scanning work was 'essential' for production of a replica 'vital in communicating 'colour' and vibrancy of the Roman period to our museum visitors' (**IMP1; PUB5**). Our work has also informed new exhibitions at Vindolanda (small finds) (**IMP2; PUB3; PUB4**) and at Birdoswald, where our analysis of data excavated in a joint project with English Heritage provided what the curator terms a 'key part' of the new display (**IMP1; PUB1; PUB5**). The Chairman of the Senhouse Museum Trust observes that our excavations at Maryport 'provided the Museum with data to underpin the redisplay of our collection that will be crucial to our success as an institution in the post-Covid world' (**IMP3; PUB6**). The Great North Museum in Newcastle (managed by the University) is the gateway for the WHS and is integral to our engagement strategy. It provides a key venue for temporary exhibitions based on our research, such as the GlobalGlass project's 'Frontier Fashion: Glass Bangles of the Roman North' (5,045 visitors, October 2017 – January 2018). By working in partnership with the museum team our research has reached wider audiences through talks, blogs and our FutureLearn course, emphasising especially our work on epigraphic material and how material culture was used in negotiating frontier identities (**PUB2; PUB5**).

Our free massive open online course (MOOC) 'Hadrian's Wall: Life on the Roman Frontier' ran in partnership with FutureLearn from September 2014-July 2020. Based on our research, the course introduces the complexity of the Wall communities in Antiquity (**PUB1; PUB2**), the dynamic nature of the Wall's development (**PUB3**), and the methodologies, from finds research (**PUB4**) to excavation (**PUB6**) and landscape survey (**PUB5**), that continue to transform our understanding of the WHS. The MOOC culminates in a discussion on the challenges of managing the WHS designed to encourage participants continue to interact with the Wall, its study and management. This 6-week course attracted 64,563 registered users from 170 countries (approximately 60% of participants were from the UK, 20% from other EU countries, 18% from North America). Detailed analysis of participant questionnaires indicates 95% satisfaction with the course. Over 98% of active learner participants believed that they learned something new and 85-95% had shared their learning with others. A survey of participants (n=3823) revealed that after the course around 70% pursued further interest in Hadrian's Wall: some were inspired to take degree programmes whereas a majority visited museums or pursued further reading (80%). 35% reported purchasing these reading materials, 30% of whom spent more than GBP30 (**IMP4, 6.5.2**). Most participants reported that the course inspired them to visit Hadrian's Wall itself (60%); testimonies provide indirect evidence of the regional financial benefit stimulated by the MOOC - 'So, after the FutureLearn course I have spent money buying books, employed local travel agents, some b&b's and restaurants and found Britain as a travel destination again ... Also our local adult education center thought about organizing a hiking trip there' (**IMP5**).

##### *2. Provided data which feeds directly into Scheduling decisions and land management discussions with local landowners*

Our field research has informed strategies for management of 10 sites, 6 of which (\*) were listed on Historic England's (HE) 'Heritage At Risk' register in 2014: Maryport; \*Beckfoot; \*Rock of Gelt; Cam Beck; Birdoswald; \*Walltown Crags; \*Mucklebank turret; \*Steel Rigg; Cats Stairs; and \*Corbridge.

Our UAV (drone) and geophysics surveys, together with building fabric analyses, have provided high-resolution mapping and structural analysis pertaining to both the study of the ancient use of the Wall and to contemporary management and conservation. Methods were developed in conjunction with the County Archaeologists and Inspectors of Ancient Monuments responsible for the care of the WHS. For example, experimental work undertaken as part of the 'Cultural Heritage Through Time' (CHT2) project developed an approach which integrated geophysics and digital photogrammetry to monitor the impact of farming practices at Scheduled sites. According to Historic England our collaborative research focussed on Beckfoot, Birdoswald and Corbridge has '...greatly increased understanding of the extent and complexity of these sites... feeding into discussions about their future management and revisions to their legal protection through scheduling' (IMP6).

Our Structure-from-Motion photogrammetry survey of the Written Rock of Gelt preserved-by-record exceptionally important Roman graffiti that is naturally eroding; the site was removed from Historic England's 'Heritage At Risk' register following successful conclusion of the project (IMP6). The results of the research reached diverse audiences through the mainstream press (including all UK broadsheets, many EU papers and US outlets including CNN), and popular media (e.g. 59,000 likes on 'Lad's Bible' website). Complementing this, WallCAP has undertaken capital conservation of approximately 660m<sup>2</sup> of degrading or collapsed fabric of the Wall in 2020 at Walltown Crags, Mucklebank turret, Steel Rigg and the Cats Stairs, resulting in applications for 3 of the sites to be removed from the HE 'Heritage At Risk' register.

### 3. Democratising Heritage Practice

The development and delivery of specialised training designed specifically for members of the public has been at the heart of our strategy for research impact. Training activities are directly informed by our research and include participation in our projects. For example, at Maryport 70 members of the public were trained in archaeological excavation techniques between 2011-15. We subsequently trained 3 of these participants to provide ongoing monitoring of coastal erosion at the nearby Roman cemetery of Beckfoot, where irregular weather and erosion events require year-round 'patrolling' which can only be undertaken by local volunteers. The Chair of the Senhouse Museum Trust (which has collection responsibility for Beckfoot) notes that the University's work 'led to the recording of the Beckfoot material being put on a more regular and sustainable footing – to the great benefit of the archaeological resource' (IMP3).

The WallCAP project organised events throughout 2019 and 2020 for members of the public, professional audiences and its 270 registered volunteers. 111 events were attended by 1,564 individuals (not limited to registered volunteers), with 73 events coordinated for volunteers resulting in 833 engagements (IMP7). For example, at Corbridge 71 volunteers participated in a training excavation in 2019 that built on the knowledge many had gained through the Hadrian's Wall MOOC. The skills and knowledge which volunteers developed by participating in these research-led events is summarised in the table below.

Theme	Skills Learned	Testimonial (participant quote) (IMP7, 16-18)
<b>Archaeological fieldwork / training</b>  Attendees: 416	Geophysical survey; topographic survey; archaeological excavation; standing buildings survey; archaeological illustration; IT skills; photography	"I enjoyed finding out about LIDAR. I learned how to excavate a site methodically and appreciate how much work goes into organising such an event." "[I learned] how to decide whether a particular site should be investigated and how to determine exactly where to focus and the best method to carry out further work - even knowing that nothing is there is useful!" "Discovery of local previously unknown (by me) interesting sites to visit and share with family...who are all of course as interested as I am."

Theme	Skills Learned	Testimonial (participant quote) (IMP7, 16-18)
<b>Geological fieldwork / training</b> Attendees: 323	Rock identification; geological formation; quarrying techniques; masonry techniques	“Signed up to a geology training course that I wouldn't have known about if it wasn't for WallCAP.” “Learning about the different types of stone, how quarried etc. Adding to my overall picture of Roman and other life on the Wall.”
<b>Interpretation and management</b> Attendees: 722	Source assessment; critical reasoning; outcome-based communication; audience interests and bias; professional practice	“I was surprised to learn all the different processes involved in planned a new gallery at the Roman Carlisle event. We analysed the current gallery, discussed at length what we liked and also what we thought didn't work. Naturally none of us agreed, so a fascinating discussion followed. It was quite an insight to hear other people's views on the gallery.”
<b>Well-being and inclusion</b> Attendees: 179	Mindfulness; appreciation of place; position of heritage in communities	“It's had a massive impact, I would have gone into real deep depression without it.” “I work full time so struggle to get along to digs and other archaeological events and activities. As such the GIS project offered flexibility, in particular given home working due to Covid19, to undertake elements of research for the project.” “I appreciated the opportunity to take part in an indoor activity as I sometimes worry my fitness may let me down during outdoor sessions.”

Furthermore, WallCAP's digital training and dissemination strategy has enhanced non-local and international participation. By 31 December 2020, @Wall\_CAP (Twitter) had 1,544 followers, and its posts resulted in 626,253 impressions (IMP7, 19-20).

WallCAP has brought together 9 stakeholder organisations (including Historic England, English Heritage, the National Trust and the local planning authorities) with 5 community groups and 270 volunteers through these activities. It has thereby created an enduring community of local people who are actively helping to safeguard the WHS from deterioration through participation in conservation activities (IMP6).

## 5. Sources to corroborate the impact

**IMP1:** Testimonial from English Heritage Keeper of Roman Collections, Hadrian's Wall (museum interpretation and display at Birdoswald and Corbridge).

**IMP2:** Testimonial from Director of Excavations/CEO, Vindolanda Archaeological Trust (MOOC/finds/museum display).

**IMP3:** Testimonial from Chair of the Board of Trustees of Senhouse Roman Museum, Maryport, (excavations/museum interpretation & display).

**IMP4:** Garland, N. 2020. *Hadrian's Wall: Life on the Frontier MOOC – Evaluation Report*. Newcastle University. (Provides quantitative data derived from FutureLearn Hadrian's Wall Course (2014-2020), offering overall figures for geographical reach, demographic reach, student engagement (learning retention), student dwell time on individual sessions, and data derived from an impact-focused questionnaire).

**IMP5:** Testimonial – learner on 'Hadrian's Wall: Life on the Frontier' MOOC.

**IMP6:** Testimonial – Team Leader - Development Advice, North East and Yorkshire Region and Inspector of Ancient Monuments (Hadrian's Wall), Historic England (Contribution of Newcastle University's research to engagement, conservation and management of the Hadrian's Wall WHS).

**IMP7:** Collins, R. 2021. *WallCAP Impact Data Report*. Newcastle University. (Lists participatory events organised by WallCAP (2019-20), number of participants, specific knowledge and skills outcomes; includes participant testimonials and social media analytics).