

<b>Institution: Cardiff University</b>
<b>Unit of Assessment: UoA17, Archaeology</b>
<b>Title of case study: Changing people's perceptions of the human:animal relationship</b>
<p><b>1. Summary of the impact</b> (indicative maximum 100 words)</p> <p>The Cardiff Osteological Research Group (CORG) has researched the complex relationship between animals and people, across Britain, Europe and beyond. CORG has taken its research as the basis for a programme of activities that seeks to challenge modern attitudes to animals through archaeological studies, and to provoke reflection on the present relevance and future development of animals. Their impact has built on relationships developed with artists and practitioners in creative industries who have been influenced by the issues researched. By encouraging a range of audiences to consider the economic, social, ritual and symbolic roles of animals, CORG has enriched, informed and changed the perspectives of individuals who do not normally engage with the archaeological past, including target groups traditionally excluded from, or not aware of, academic research.</p>
<p><b>2. Underpinning research</b> (indicative maximum 500 words)</p> <p>The key research undertaken by members of Cardiff Osteological Research Group (CORG) has been a series of studies that highlight the enduring economic and social importance to human society of animals across Britain, Europe and beyond. CORG has examined the manipulation of both the physical form and social meaning of fauna, and investigated their transformation from hunted prey, to farmed stock, to pampered pet over the past 10,000 years.</p> <p>This research has been supported by major grants (e.g. NERC Standard Grant £413,197, 2009–13, <i>Changing Patterns of Marine Product Exploitation in Human Prehistory</i>, Evershed and <b>Mulville</b> (Co-PI)), drawn upon a wide range of sources and techniques, from traditional and innovative osteoarchaeological methods, to ethnography and ancient DNA, and examined case studies from the Mesolithic and early Neolithic onwards (including now at Çatalhöyük, Turkey), up to the medieval and post-medieval periods.</p> <p>Working within Britain, for example, on the Western, Northern and Scilly Isles, CORG has traced the ebb and flow of human and animal interactions across land and sea, with cognate studies of birds, that have resulted in a series of substantial publications (e.g. <b>3.1</b>). Comparative research into insular and mainland societies has stimulated further research on the management of wild resources, leading to a detailed examination of the husbanding and capture of large and small game species (e.g. deer, whales, birds and fish) and an examination of their social and economic significance to ancient farming communities (e.g. <b>3.2–3.5</b>). Daily, seasonal and lifetime cycles have been studied in detail through the analysis of slaughter patterns, milk production, cooking, eating and rubbish disposal, as well as by the investigation of the foddering of stock, their periodic movement and migration, and the role of animals in ceremonies that mark life events (<b>3.3</b>).</p> <p>Research insights have included new understandings of the materiality and agency of animals (and their remains) and the nature of human:animal relations. Key themes include the creation, definition and role of 'wild' versus 'domestic' species (<b>3.6</b>), the significance of hunted animals, long-distance trade in animals, the avoidance of marine foods, fauna in ritual and burial practices (<b>3.3</b>), and diachronic studies of animal exploitation in rural (<b>3.1</b>) and urban societies. Outcomes have changed our understanding of, inter alia, the nature of early whaling, the development of milk-based economies, insular deer management and transportation (<b>3.1, 3.5</b>), puffin-based small island economies (<b>3.4</b>), the role of animal sacrifices and subterranean burial traditions in defining social units (<b>3.2</b>), the agency of antler as a symbol of regeneration, and fish-eating taboos to highlight hitherto neglected aspects of human:animal relations from the Mesolithic and early Neolithic to the medieval period.</p> <p>The research undertaken by CORG was carried out between 2002 and 2012 (and continues). The</p>

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team is led by Dr Jacqui Mulville (Reader, 2002–on-going), with key support from Dr Jill Baird (2000–on-going) and Professor Niall Sharples (1995–on-going). PhD students participating in the research include Richard Madgwick (AHRC 2009–12, now British Academy Post Doctoral Research Associate, 2013–15), Ffion Reynolds (AHRC, 2008–11), Julia Best (AHRC, 2010–13) and Jennifer Jones (NERC, 2010–13), and Lara Hogg (AHRC 2011–), Matt Law (2010–), and Sean Rice (Historic Scotland 2012–) (all on-going). Research was further supported by IFA interns Madgwick (2008–9) and Roisin McCartney (2009–10).

### 3. References to the research

- 3.1 **Mulville, J.** and Powell, A. 2012. Mammalian bone; Resource exploitation; Site activities; Discussion. In N. Sharples (ed.), *A Late Iron Age farmstead in the Outer Hebrides*, 191–194, 226, 233–242, 246, 299–306, 339–341, 345–346. Oxford: Oxbow Books. ISBN: 9781842174692
- 3.2 **Mulville, J., Madgwick, R.,** Powell, A. and Parker Pearson, M. 2012. Flesh on the bones: animal bodies in Atlantic roundhouses. In A. Pluskowski (ed.), *Animal ritual killing and burial*, 205–19. Oxford: Oxbow Books. ISBN: 9781842174449
- 3.3 **Reynolds, F.** 2012. Totemism and food taboos in the Early Neolithic: a feast of roe deer at Coneybury. In H. Anderson-Whymark and J. Thomas (eds), *Regional perspectives on Neolithic pit deposition: beyond the mundane*, 171–186. Oxford: Oxbow Books. ISBN: 9781842174685
- 3.4 **Best, J. and Mulville, J.** 2010. The fowling economies of the Shiant Isles, Outer Hebrides: resource exploitation in a marginal environment. In W. Prummel, J.T. Zeiler and D.C. Brinkhuizen (eds), *Birds in archaeology*, 87–96. Groningen: Groningen University Library. ISBN: 9789077922774
- 3.5 **Mulville, J.** 2010. Wild things? The prehistory and history of red deer on the Hebridean and Northern Isles of Scotland. In T. O'Connor and N. Sykes (eds), *Extinctions and invasions: a social history of British fauna*, 43–50. Oxford: Windgather Press. ISBN: 9781905119318
- 3.6 **Sharples, N.** 2000. Antlers and Orcadian rituals: an ambiguous role for red deer in the Neolithic. In A. Ritchie (ed.), *Neolithic Orkney in its European context*, 107–116. Cambridge: McDonald Institute for Archaeological Research. ISBN: 190293704-X.

[All outputs available from the HEI on request]

### 4. Details of the impact

In an increasingly urban society often alienated from nature, CORG's impact activity is designed to encourage an exploration of the complex relationship between humans and animals by presenting new research on the past relationships. Since 2007 three activity pathways have been designed to attract audiences traditionally unaware of the type of research under scrutiny.

#### 1. Developing new audiences for zooarchaeological research

One pathway, *Guerilla Archaeology (GA) (5.3)*, works with creative arts organisations to deliver interdisciplinary workshops at music and arts festivals. GA provokes public response by enabling individuals to co-create a past rooted in CORG's research. Provocative topics and performances (Shamans vs Goddesses, Animal Symbolism and Sacrifice, Farmers vs Hunters, Animals and Artefacts) that relate to CORG research are used to interact with 15–35 year-olds (identified as the group most alienated from science, *Public Attitudes to Science, 2011, RCUK*). The reach of GA is documented by visitor counts, outputs and images (5.4) with over 8,000 people attending workshops to date, and more than 5,000 participating in either a creative or discursive event. Since April 2012 social media and digital resources have logged more than 16,000 visits to the GA website, and hundreds regularly follow and comment on GA activities via social media (e.g. individual Facebook posts reach 1.5K, 800 Twitter followers).

As an example, in 2012 GA created interdisciplinary workshops (*Shamanic Street Preachers*) focused on research into the early prehistory of British human:animal relations, supported by online resources, 'gateway' artefacts and artistic collaborations. Our production of experimental recreations of Mesolithic antler head-dresses engendered a broader debate among those participating on shamanic/ritual and practical interpretations of animal remains, including a feature within the *TimeTeam* 'Mesolithic Tsumani' programme (broadcast June 2013). Other GA

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workshops in 2012–13 (5.3, 5.4) were delivered at five British music festivals (Glastonbury, Green Man (5.5) Secret Garden Party, Wilderness (5.6), Shambala) and to a wider urban audience in shopping centres, museums, art centres and galleries. Research indicates that festival participants derive from a broad array of social, economic and cultural groups with an average age of 28 years (UK Festival Report 2012). Although GA targets 15–35 year-olds, we interact with an increasing number of 35 plus (e.g. Glastonbury 2013 profile: 25-39 **38%**, 40-64 **36%**) and a similar proportion of males and females (51% to 49%).

Secret Productions (who organised two of the events) attest that the response to the mixture of art, science and creativity Guerilla Archaeology use *'has been fantastic and attracted large audiences. The collaboration between academic staff and creative artists ... provided festivalgoers with a novel and unexpected way of encountering research and brought an entirely new dimension to our various events. Face-to-face conversations, provocations and interactions provide a level of accessibility, authenticity and audience impact that speakers alone cannot hope to achieve'* (5.6).

The significance of our impact is further evidenced in the statements of 98% of workshop participants who agree that CORG research (delivered via GA workshops) has changed the way they think about animals and report an increased understanding and appreciation of the human:animal relationship. Qualitative analysis has revealed an enhanced sense of history and tradition – As one participant commented, *'I can see now that people in ancient times were not simply savages – they were more civilised than we are now – they had respect and never wasted a thing, if they killed an animal they would use every bit of it (M, 40-64)'* The most common words in our feedback clouds are *'interesting, inspiring, enlightening and educational'* (5.3).

**2. Provoking reflections on past, present and future relationships with animals**

Another pathway, *Future Animals* (started 2009, partnered with Amgueddfa Cymru National Museum Wales (ACNMW)), led to a series of intensive workshops and exhibitions exploring human:animal relations via the medium of art and was targeted at 14–16-year-olds. Working with an artist, participants in three workshops were challenged to design the pets and farm animals of the future, in response to our research that explored animal manipulation in the past. These 'Future Animal' images then formed the springboard for a discussion of the ethics of ancient, modern and future animal breeding.

Survey and filmed interviews revealed an increased awareness of historical, biological, cultural and ethical aspects of domestication. 'Future Animal' images, accompanied by an explanatory film, were presented to the public in a NMW exhibition (spring 2010) and the Museum Education Officer comments that it was *'a highly successful project in bringing together academics, teachers, artists, museum staff, university postgraduates and young people. The use of art and archaeology to explore the ethics of animal breeding was truly innovative'* (5.1). The public response was captured via an invitation to produce their own 'Future Animals' for display and an estimated 1500 annotated images of animals were produced.

Discussion has also been generated by a live-streamed TEDx 2012 talk by Mulville (5.2), with a direct audience of more than 1600. 'Future Animals' and TEDx have also featured in debates on perceptions of wild animals at a 'SciScreen' at Chapter Arts Centre, Cardiff, a public forum that discusses contemporary developments in science and facilitates debate on the wider social and cultural implications of these advances. The resources created have led to participatory workshops at scouts/guides events, and in schools (as far afield as Turkey and Kazakhstan), museums and universities. [5.3]

**3. Stimulating artistic responses to human animal relationships**

Alongside working with museum and festival curators (5.1, 5.5, 5.6), CORG has worked with visual artists (e.g. Paul Evans: Future Animals, Shamanic Street Preachers, *Mind in the Cave*) and re-enactors, and changed their practices. Evans (5.5) joined CORG as a Leverhulme funded Artist-in-Residence and explored skeletal form, the symbolic meaning of animals, the zooarchaeological process and the materiality of osteological remains, and has become an important part of the GA team.

Evans reports *'My collaboration with Dr Mulville and Guerilla Archaeology has had a substantial*

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*impact on my professional practice ... my understanding of the human:animal relationship has been substantially broadened and enriched ... In fact every conversation triggers a new set of ideas and new avenues to explore - a genuinely rhizomatic and inspiring network of knowledge and ideas that, as long as the relationship continues, will provide enough material for a lifetime of creative practice' (5.7).* He presents his work in a series of highly successful blogs (e.g. Osteography (Leverhulme) 32,000 hits) and has produced artworks, public exhibitions (e.g. Animal Magic, June 2013, Derby Museum), workshops, and seminars.

CORG has also worked with musicians (Dylan Adams: Shamanic Street Preachers) and shamanic ethnographers /practitioners (e.g. Dr Henry Droselda: SSP) who have expanded their artistic practices to incorporate our research themes within their work. Our interest in animals as artefacts and materials has also inspired creativity in re-enactors, costumiers and crafts people (5.8).

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

**5.1** Natural History Education Officer. Testimonial (11.07.2013)

**Impact claim summary:** corroborates impact of CORG research in enhancing Amgueddfa Cymru - National Museum Wales interaction with the public on the theme of the human:animal relationships.

**5.2** TEDx Video (10 April 2012), Dr Jacqui Mulville at TEDxCardiff 2012. Available at:

<http://www.youtube.com/watch?v=UhOlbvYpKhE>

**Impact claim summary:** corroborating impact of Mulville *et al* research on perceptions of past present and future animals to wider audiences.

**5.3** Guerrilla Archaeology. Available at <http://guerillaarchaeology.wordpress.com/> and <http://www.facebook.com/GuerillaArchaeology>.

**Impact claim summary:** corroborates use of innovative engagement activities to enhance public understanding of human and animal archaeologies.

**5.4** GA Flickr. [http://www.flickr.com/photos/guerilla\\_archaeology/sets/](http://www.flickr.com/photos/guerilla_archaeology/sets/)

**Impact claim summary:** provides visual evaluation of the participants in GA activities.

**5.5** Curator of Einstein's Garden, Green Man Music Festival. Testimonial

**Impact claim summary:** corroborates innovative inter-disciplinary engagement activities enhancing public understanding of science.

**5.6** Curator of Secret Productions. Testimonial (11.07.2013)

**Impact claim summary:** corroborates use of innovative inter-disciplinary activities to enhance public understanding of human and animal archaeologies.

**5.7** Paul Evans Artist. Testimonial (16.07.2013)

**Impact claim summary:** corroborates impact of CORG research on artistic practice.

**5.8** Director of GreenCrafts. Contact

**Impact claim summary:** reinvigorating antler craft industries as a result of Glastonbury outreach.

All webpages, documents and testimony available as pdf's from the HEI on request.