‘REWILDING’ LATER PREHISTORY:

using palaeoenvironmental evidence to reveal the ‘wonder and enchantment’ of past wildlife, and to showcase archaeology’s central role in future nature recovery

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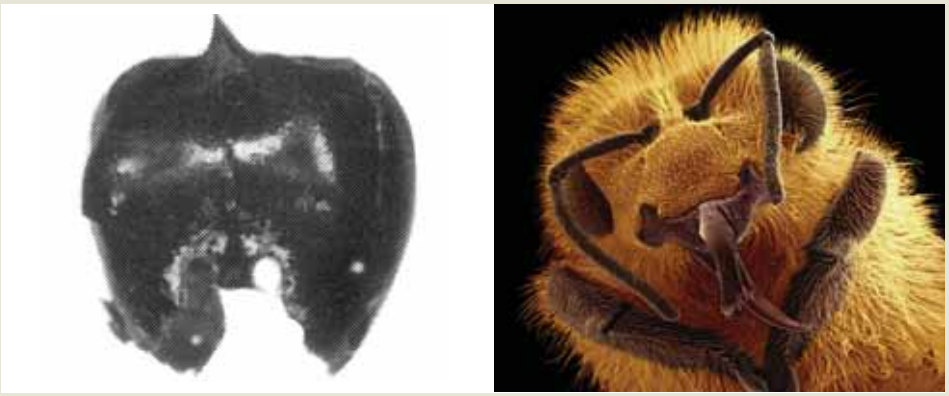
Discussions about climate change and biodiversity loss, and attempts to limit them, currently abound. David Attenborough’s new Wild Isles series both awakens us to the magical wildlife of the British Isles and warns us of its extreme fragility. Wider media coverage bombards us with statistics about threatened and diminishing species – from honeybees, to capercaillie, to elm trees. At the same time, we hear hopeful stories about new farming methods that help to revitalise biodiversity and boost the sustainability of a much-threatened industry; about the positive actions of species introduced into protected landscapes – wild boar, white stork, beaver, and so on – and about ambitious government plans for national-scale nature recovery. In this context, archaeologists have rightly revisited their working relationships with ecologists and have sought to make archaeology relevant to current debates. A new four-year UKRI-funded research project – ‘Rewilding’ later prehistory: Bronze and Iron Age ecologies from the perspective of the wild – captures this moment by taking positive practical steps to foreground the ‘wonder and enchantment’ of past wildlife, and by asking important questions about how archaeology can play a central role in global interdisciplinary nature recovery agendas.

The ‘Rewilding’ project, led by Oxford Archaeology (OA), brings together an international network of archaeological scientists, digital specialists and rewilding experts. Our use of the term ‘rewilding’ is a deliberate play on words. Contemporary ecological rewilding aims to restore wildlife areas in modern landscapes, to reinstate species – like beavers – that have become locally extinct, to let natural processes – scrubland regeneration and rewetting – take over, and to encourage a wide set of people to reconnect with nature. Archaeological ‘rewilding’ aims instead to reconnect archaeologists with elements of past landscapes that were beyond human control, and to ask what wildlife was in past landscapes, what wildlife meant to people in the past, and why an archaeological perspective on wildlife matters now. Leading the project from Oxford Archaeology gives landscape and environmental archaeology experts at a major fieldwork organisation time and space to explore cutting-edge research themes, to extend their research skills, and to pilot research methods that enhance Oxford Archaeology’s charitable and business aims. We are working with colleagues at CIfA, Historic England, the Association for Environmental Archaeology and the University of Bournemouth to respond to the results of our survey of key training needs and resource requirements for researchers in developer-funded archaeology.



Head of a honey bee from a Middle Bronze Age enclosure ditch at Mingies Ditch, Oxfordshire, alongside a modern example (Credits: Oxford Archaeology; Annie Cavanagh. Attribution-NonCommercial 4.0 International (CC BY-NC 4.0)). Recent declines in bees and beekeepers have led to claims of a global pollination crisis

One key ‘Rewilding’ project aim is to create a novel holistic account of Bronze and Iron Age ecologies – from 2500 BC to AD 43 – in the Thames Valley, the East Anglian Fens, Northumberland, West Sussex and Wales. The Bronze and Iron Ages cover a key tipping point in the transition from wild to farmed landscapes in Britain, when extensive field systems emerged and vast tracts of woodland were cleared. As yet, however, there is no cross-regional synthesis of a full spectrum of plants and animals for this period. Traditional histories of Bronze and Iron Age landscapes focus almost entirely on stories of human ‘progress’ or of environmental loss – intricate accounts have been built of farming revolution, technological achievement, urbanisation, woodland decline and animal extinction. Meanwhile, subtler but still important narratives – of woodland regeneration, phases and regions of heightened human mobility, farming setbacks, and the essential role of wild plants and animals in everyday lives – have been overshadowed.

Since their introduction in 2016, white storks have made the Knepp landscape, West Sussex, their home. Alongside creating nests that also attract sparrow colonies and managing small mammal, earthworm and insect populations, this graffiti in Brighton shows the extent to which white storks offer a charismatic totem for nature recovery, connecting people in towns and villages with the wider landscape. Credit: Knepp Castle Estate

Evidence for prehistoric wildlife can be extremely difficult to reach. This is partly because wild plant and animal remains are often not preserved in archaeological deposits. Information about such remains (and especially those of wild species) can also be hard to recover from assorted data silos across British archaeology. Even so, extraordinarily well-preserved sites like the Late Bronze Age pile-dwelling settlement at Must Farm, Cambridgeshire, offer vivid reminders of just how important wild species were in prehistoric peoples' lives. Elsewhere, deposits of objects like pierced limpet shells, a white-tailed eagle talon, or a pillow of meadowsweet in prehistoric burials, and odd collections of wild animal remains – red and roe deer, pine marten, wild boar and badger fragments in a Bronze Age watering hole – raise important questions about how prehistoric people understood wildlife. Ecological combinations and species that blur the boundaries between 'wild' and 'domesticated' – weeds, horses, and hedgerows – are another key research focus.

The OA team will work closely with environmental archaeologists and the Archaeology Data Service (ADS) to improve access for all to digital information about plant and vertebrate animal remains. We will link up with scientists at the Universities of Oxford and Exeter, and the Centre for Ancient Genomics, Toulouse to create an original toolkit for investigating archaeological wildlife, using high-resolution aDNA and isotope methods to explore themes such as horse 'ferality', the vegetational makeup of 'blank spaces' – landscapes where repeated investigations have produced no archaeological trace – and whether or not it is possible to identify and characterise prehistoric hedgerows archaeologically. Overall, we hope to gain fresh insight into how wildlife and people shaped one another in prehistory, and into just how 'wild' habitats commonly understood as areas of 'wilderness' – for instance woodlands – actually were.

Traditional narratives which focus on farming revolution and environmental loss in prehistory are reinforced via captivating reconstruction drawings like this one. Credit: Oxford Archaeology

Pierced sea eagle talon, mammal rib, boar tooth and clay bead, buried with an Early Iron Age child (c. 2800 BP) at Soham, Cambridgeshire. Credit: CFA Archaeology

Many of our research ideas have been shaped by the interests of rewilding pioneers and project collaborators, Knepp Castle Estate.[1] By working closely with nature recovery experts and volunteer groups, we want to explore the many ways in which archaeology and nature recovery can be mutually beneficial.

[1] https://www.rewildingbritain.org.uk/rewilding-projects/knepp-castle-estate

Cutting-edge methods and underused datasets for our archaeological wildlife toolkit: (a) using contemporary hedging practices to improve identifications of hedges in prehistory; (b) horse tooth samples in preparation for high resolution isotope analysis; (c) existing but currently unused pollen samples awaiting further analysis and dating on the 'Rewilding' project. Credit: Oxford Archaeology

The 'Rewilding' project team with colleagues at Historic England and Knepp Castle Estate. Credit: Tina Roushannafas, Oxford Archaeology

Palaeoenvironmental evidence can inform understandings of current ecological patterns – for instance by determining whether current species declines are part of longer-term cycles or are a direct effect of recent climate change – and can provide fascinating details about the histories of species being considered for reintroduction in nature recovery projects. 'Rewilding' researchers are already learning from Knepp ecologists how animal–plant dynamics in current rewilding landscapes can help us to interpret interspecies relationships in archaeological settings: herbaceous plant combinations previously thought by archaeologists to be related to human activity can in fact be created by rootling pigs. Studying a period in which tending to wildlife was integral to farming practices offers a novel perspective on current relationships between farming and wildlife. Illuminating past understandings of wildlife can help to challenge the idea that 'wildlife' has a fixed definition. We will also be working with artists and ecologists to build creative archaeological wildlife interpretations for visitors to rewilded landscapes, the income from whom, importantly, funds further nature recovery work.

For more information about the 'Rewilding' project and upcoming events, follow us @RewildArch, listen to our Knepp Wildland podcast (https://t.co/f1M91NSFyJ) or visit our website at: https://rewilding.oxfordarchaeology.com/

Tina Roushannafas

Tina is a postdoctoral researcher on the 'Rewilding' later prehistory project. Tina specialises in ancient plant remains (archaeobotany), having completed an environmental archaeology master's in 2016/7 and worked as an archaeobotanical lab technician in 2018/9, both at the University of Oxford. She has several years' experience in developer-funded archaeology, starting out in the field and later working as a project officer specialising in environmental sampling/analysis. While particularly interested in prehistoric and early medieval Britain, she has worked on a range of assemblages, including Neolithic and Bronze Age sites in the Near East. Her research interests include the uses of wild plants, diversification and resilience in crop cultivation and open science practices. Her PhD research utilised geometric morphometrics (statistics-based shape analysis) to explore diversity in archaeobotanical wheat remains.

Anwen Cooper

Anwen is the lead investigator on the 'Rewilding' later prehistory project – a UKRI Future Leader Fellowship. Anwen's main research interests are later prehistoric Britain and Ireland, and interpretative approaches to landscape, material culture, and archaeological practice. She has worked across the sector in British archaeology, as a field surveyor, landscape-scale site director, and development control officer (1996–2006), and as a postdoctoral researcher on high-profile collaborative projects at the Universities of Oxford, Manchester and Reading (2012–2022). Her PhD explored knowledge creation during archaeology's 'professionalisation' during the period 1970–2010, drawing on CIfA archival material. Most recently, she worked with a team at Cambridge Archaeological Unit to bring to publication the spectacular Late Bronze Age pile-dwelling settlement at Must Farm, Cambridgeshire.