

Preface

Prehistoric wetland deposition is widely discussed in archaeological theory, but it is primarily subjected to isolated site case studies. A holistic analysis of wetland deposition restricted to the prehistoric period, is essential to understanding cultural practice and evolution of traditions.

The study of wetland deposition is complicated when we consider the multifaceted components of research required to observe, analyse, and interpret these Iron Age traditions. As wetlands have been primarily portrayed as periphery locations, it should instead focus on the regional and sub-regional relationships with wetlands, and their significance for the local communities outside of sustainable resources.

The concept of ‘separation’ or ‘isolation’ is a modern construct used to improve understandings of depositional activity that is not related to daily occupation. Preceding arguments have made fundamental and valid contributions to the debate. However, a holistic approach is now required to interpret statistical trends sourced from big data sets for wetland object deposition to propose communal and regional traditions.

In previous studies, artefacts discovered in wetlands were often attributed to ‘votive offerings,’ ‘sacrifice’ or ‘theological ritual’ (e.g. Aldhouse-Green 2001; Aufderheide 2003: 178; Bradley 1990, 2017; Fox 1946; Hedeager 1992: 162; Kelly 2006; Randsborg 1995; Van de Noort and O’Sullivan 2006; Van der Sanden et al. 2013; Wells 2007). Archaeologically, it has been widely accepted that wetlands are important locations for prehistoric deposition occurring throughout north-western Europe and parts of the Mediterranean. Objects reported from wetland contexts are often broadly classified as votive or sacrificial, with an overall lack of clarity as to why certain deposits are considered the product of ritual.

Therefore, a holistic evaluation of wetland object deposition for Iron Age Wales and Scotland is needed. The objective was to identify trends and patterns in the data that could provide new or confirm pre-existing wetland depositional traditions which were not archaeologically associated with settlement or production sites. Local and external influences on the typology, materials and resources, landscape, and quantity along with quality were reviewed. Nevertheless, unbiased patterns of depositional behaviour were limiting due to pre-existing biases, such as: varying regional collection methods, the extent of the archaeological investigation after objects are reported, the lack of understanding artefact variance and provenience, or that certain materials survive better in comparison to others – all directly impact the patterns presented in the

data collected. As such, existing gaps within the data are highlighted and addressed as to why this has occurred. Theories of ritual,¹ deposition, and socio-cultural advantages of performing wetland deposition were also scrutinised for their pertinence in comparison to the collected statistical evidence.

Advancements over the last fifty years or so have been made in archaeological methods and interpretative frameworks with a shift in academic archaeology in favour of big data to determine patterns of prehistoric behaviour (Cooper and Green 2017; Gattiglia 2015; Kintigh 2006; Snow et al. 2006). In this vein, Kintigh (2006: 567) states, ‘For archaeology to achieve its potential to provide long-term, scientific understandings of human history, there is a pressing need for an archaeological information infrastructure that will allow us to archive, access, integrate, and mine disparate data sets.’ Museum and digital heritage catalogues provide a continual expansion of records for artefact finds. However, as inclusive as many of the digital heritage online catalogues aim to be, they do not always record the broad range of variables that are necessary for holistic archaeological analyses of this type (Treadway 2021b).

Likewise, while it is and remains logical to presume similar practices occurring cross regionally would denote analogous practice, minute to major differences in the material, object type, whole or fragmented, and location all characterise regional customs. Therefore, archaeologists should not assume that all similar actions are performed with the same incentive. These types of practices, however, do tend to have similar outcomes, such as a developed common social identity through a shared experience, or creation of an evolved or adaptive mnemonic to retain collective memory. Consequently, the collection of Iron Age artefact records reported from Wales and Scotland, based on wetland landscape type and period, are advantageous for the development of prehistoric social relation theory.

Even with these two parameters (i.e. Iron Age and wetlands), there are limitations as to what can be achieved when applied to a prehistoric environment. Mass collection of object data placed within specific contexts,

¹ Ritual in this context, a behaviour that is habitual with any range of intention, not necessarily connected to a theological belief in perception of modern thought. Ritual in previous arguments referenced, however, do use the term to mean continual actions with a possible connection to deity worship. Theories to be challenged are most often contested from ethnographic accounts or from the Romanticism period whereby the people are associated with behaviours or intentions that are false.

such as wetland environments, allowed for patterns and trends to become more recognisable. However, these trends may be the result of modern collection methods, as opposed to prehistoric activity. Nonetheless, it is only when these trends are analysed in such a manner that themes of regionality, distribution of materials, treatment, and context become more discernible.

Four main questions were developed provided a comprehensive parameter for the project.

- What role did wetland landscapes have in depositional practices?
This theme examines the purpose of wetland depositional practices and the relationship of those who actively participated with the landscape. Furthermore, the relationships between performance, objects, participation, and landscape are considered for its cognitive functions in fortifying collective memory.
- What trends can be identified for depositional practices in wetland areas?
This research question explores if there are patterns of depositional practice reported from wetland areas. These trends can range from popular object types, deposit assemblage configuration (i.e. hoard, single deposit), material composition, and landscape preference.
- What are the regional and sub-regional differences or similarities in depositional practices?
Differences in depositional practice both cross-regionally and within individual communities are expected. However, because wetland deposition does share common aspects of practice, this portion of the research will identify cultural traditions from communal variation.
- What do these practices reflect about local communities and shared cultural traditions regionally?
What information do wetland depositional practices provide about those who deposited the objects and how? Furthermore, how does wetland deposition distinguish itself as a cultural tradition in Wales and Scotland?

The study only observed Iron Age wetland deposition practice in Scotland and Wales, and did not extend to England for two main reasons. First, the initial review of the materials reported from wetlands revealed the high volume of objects reported from England alone. As a result, a decision was made to either study England in isolation or to compare two regions. Second, the amount of material reported from Wales was proportionate to that from Scotland. This led to the conclusion that case studies from Wales and Scotland presented the better choice for comparison because, while a large landmass separates the regions, historically they show evidence of similar prehistoric practices.

Scotland and Wales were divided into sub-regions to observe archaeological patterns or variations further.

Considerations for sub-regional allocations included settlement activity, typological groupings, and deposition traditions. Scotland was divided into five regions based on Hunter's (2007) sub-regional allocation of production. These regions are Highlands and Islands, Northeast, Central, Southeast, and Southwest (Figure 1.1). Hunter's (2007) division was considered the best representation of archaeological activity in Scotland, as the typological illustrations for variety correspond with sub-regional depositional practices.

Wales was allocated slightly differently than Hunter's Scotland, which is dependent on typological representation. Originally, Hawkes and Hawkes' (1948) division allocated five regions based on observed archaeological activity. These divisions were Monmouth and South Wales, the Black Mountains, Pembrokeshire, Central Wales, North Wales and Anglesey. However, for this project, the allocation of sub-regions in Wales was determined by Iron Age depositional activity. Whilst the eastern portion of Wales is traditionally identified as the Marches, it was divided into north and south due to the noticeable difference in wetland deposition practice. As a result, the Welsh Archaeological Trust allocations fit well for the division of wetland deposition activity, whose allotments also follow the region's topography. These regions are Northwest (Gwynedd Archaeological Trust), Southwest (Dyfed Archaeological Trust), Northeast (Clwyd-Powys Archaeological Trust), and Southeast (Glamorgan-Gwent Archaeological Trust) (Figure 1.2). However, due to differing levels of urban excavation, industrial and survey contracts, and biases in preferred research, observed archaeological activity in Wales is not evenly distributed in some areas.

LandIS and Scotland's Soils databases were used to confirm wetland environments and evidence of hydric sediments utilising the coordinates provided from museum object record finds. Utilising the sites' coordinates allowed a little over 15,000 site records dating to the British Iron Age environmental contexts to be confirmed. Hydric soils were observed because of their potential to expose archaic wetland environments that have been drained or managed by farmers and industry. Additional research into the exact location concerning a water source and town records of flood zones further supported this hypothesis.

Specific sites were not included for analysis based on expert recommendations. One such site was Culbin Sands. Dr Hunter, the Curator at the National Museum of Scotland, advised that there was not enough evidence to support that certain objects were deposited in the intertidal zone versus the dunes because these were too far from the coast, even with higher tides. A similar site at Luce Sands has been suggested to be a possible production site according to Professor Sharples, and was therefore excluded.

Caves were also not included in the study because sites tend to be problematic with dating and distinguishing habitation from deposition behaviours. Other problems,

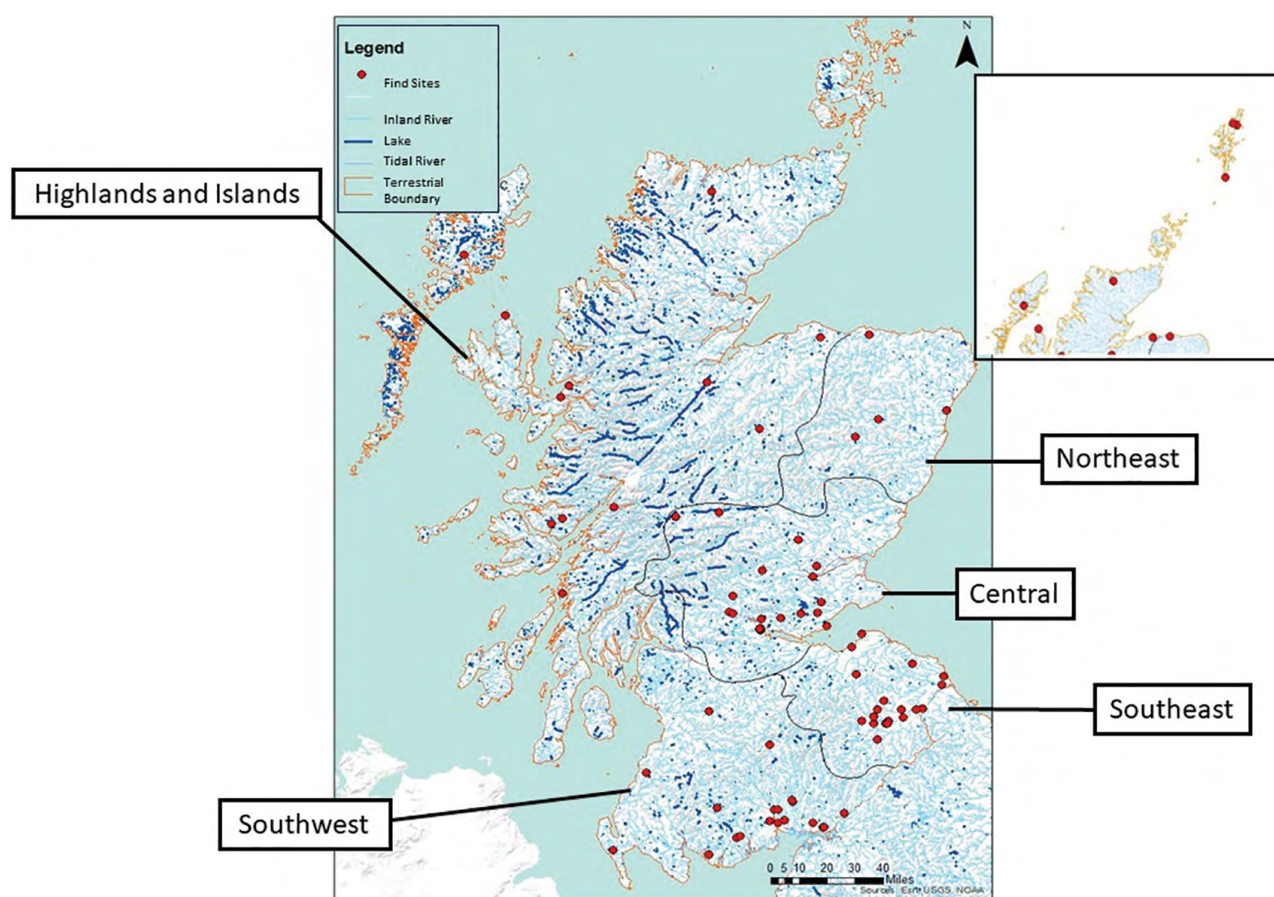


Figure 1.1. Map of Scotland with labels of the sub-regional division. The red dots represent deposition sites.

for example, include contemporary flooding, making re-evaluation of these types of site too difficult to assess at this current juncture with the limited resources allocated.

For archaeological sites and materials to be eligible for the project, they needed to be of Iron Age date and from a wetland context. Several established catalogues and databases were utilised for the construction of the project's catalogue. The catalogues used were: Sir Cyril Fox (1946), MacGregor (1976), Savory (1976), Earwood (1993), Martin (2003), Garrow and Gosden (2012), and Horn (2015). Digital catalogue platforms utilised were: Portable Antiquities Scheme, Canmore, Coflein, Historical Environmental Records (HERs), Archwilio, and the Royal Commission of Archaeology Wales and Scotland (RCAHMW, RCAHMS). Museums were contacted even if there was no apparent connection with British prehistoric material, but still contained a diverse and international collection. Of the thousands of Iron Age sites catalogued in museum collections, this method of collection resulted in around 600 to 700 potential Iron Age wetland findspots prior to distinguishing between settlement, production, and deposition site. Of the 193 museums contacted, only 22 museums had objects of Iron Age date and from a potential wetland context.

Each findspot was evaluated for their potential prehistoric or surviving wetland environment. This method required

sorting through hundreds of archaeological sites in Wales and Scotland. Descriptions of the findspots were used to determine the location of discovery further and compare it to the modern environment. City and county records were then sourced to assess how the environment may have been altered through drainage operations or urban development. One prevalent description which continued to recur in older finds was the broad applications of a 'wet' findspot without further explanation. Comparison of the general findspot location with modern soil-scape maps revealed these objects were generally found in peatland or floodplain areas. In several instances, however, only brown soils remained. Further investigation into brown soil areas revealed that many of the peatlands, particularly in Scotland, have been drained for husbandry. However, as in the case of the Deskford carnyx find, pockets of peat still survive and, as a result, continue to preserve the objects deposited (Hunter 2001, 2019b).

Only objects were considered for the study due to the extensive research of the deposition of human remains. Bog body research has been thoroughly investigated by Stevens and Chapman (2020) for England, Davis (2018) for Wales, Cowie et al. (2011) for Scotland, the Bog Body Research Project at the National Museum of Ireland for Ireland, and Giles (2020a) for the whole of Britain. There are gaps in the knowledge and a lack of systematic recovery in faunal and object deposition research. Faunal

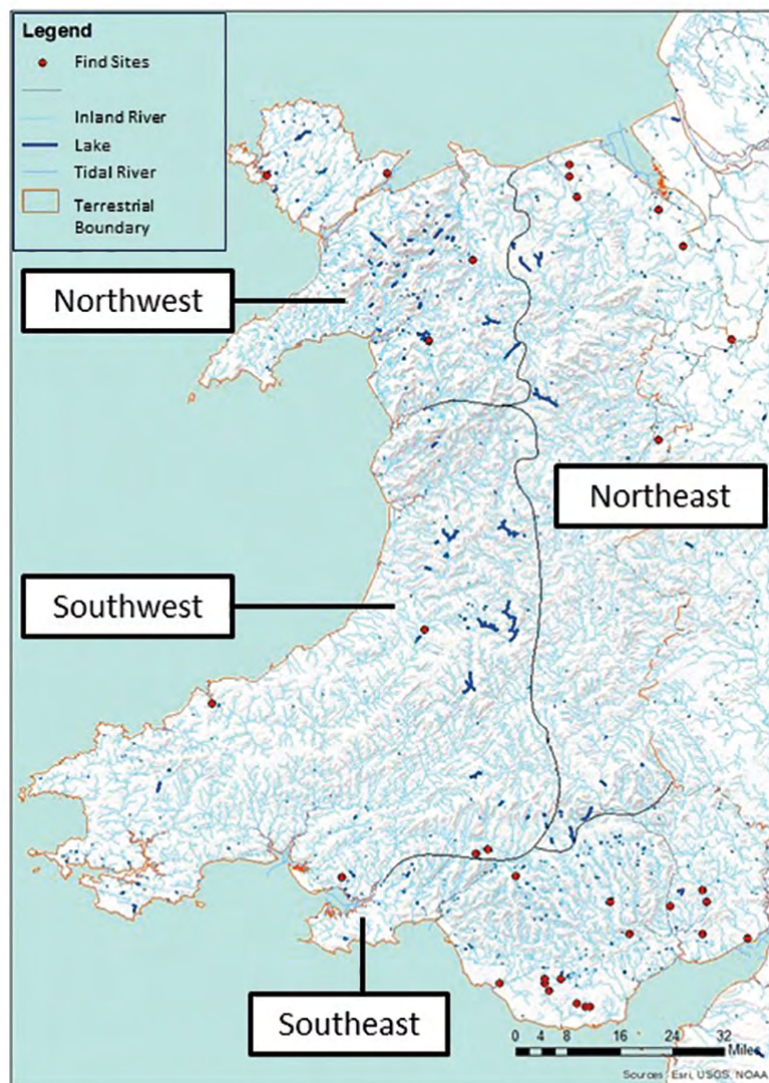


Figure 1.2. Map of Wales with labels of the sub-regional division. The red dots represent deposition sites.

remains have yet to be studied in isolation because it is usually noted along with human or object deposition but often dismissed as accidental or natural deaths; and future research is needed to expand on this area of deposition in wetland locations.

Certain object types were excluded from the study because of their broad application throughout prehistoric periods, like stone tools or weights. Additionally, canoes were generally not included in the study unless they had a calibrated carbon date or associated material that could denote some level of intentional deposition. While certain cases did indicate intentional deposition or an association with a specific tradition, objects with ambiguous context and lack of calibrated or typological chronology were excluded.

From the data collection process described above, and with thousands of sites considered, 102 case study sites resulted in 569 objects (minimum number) extracted from reports

and utilised for analyses of depositional practices. The exact findspot for these objects (i.e. NGR, easting and northing, latitude and longitude) will be withheld in accordance with agreements with PAS and the Treasure Trove.

Consideration of the limitations and taphonomic biases was essential for the project. Due to the volume of material and individual sites, the project has had to rely on previous analyses of the material composition, as opposed to conducting primary evaluations. Certain artefact materials were able to be confirmed during visits to the aforementioned museums. Nevertheless, like the Nant-y-Cafn hoard reanalyses, there is an acknowledgment that metal objects have the potential to be layered multi-mediums (e.g. the outside wrapped in copper alloy, but the internal structure is iron). For objects that have evidence of layers, these materials were also recorded.

As a result, the chronology of the Scottish Highlands and Islands follows the 'long Iron Age' date. The Iron Age

period for this region extended from 700 BC to around 800 AD through evidence of the continuous monument types such as Atlantic roundhouse tradition and broch tower construction (Armit 2003; Armit and Ginn 2007; Barrett 1981; Foster 1989). For mainland Scotland, the chronology follows the standard Iron Age date allotment but extended to 500 AD as per Armit's (1997a: 15) proposal. Large portions of Scotland were unaffected by the Roman conquest, and other regions had differing periods of occupation. Therefore, extending the end of the Iron Age for Scotland until 500 AD is logical due to the variability of cultural disruption and consequential reaffirmation after their exit.

Similarly, the Iron Age in Wales has been interpreted to begin around 800 to 700 BC, as marked by the presence of the Llyn Fawr typologies (O'Connor 2007). However, the Iron Age in Wales is generally provided with a strict exiting period around 43 AD due to disruptions of the Roman conquest (e.g. Ritchie 2018). In contrast, Davis and Gwilt (2008) have proposed that the Iron Age instead ended around the first century AD through their study of Campaigning Art typology. For the premise of this project, however, the collection of records extended to pieces that dated to the second century AD because the transition between periods is often ambiguous.

Objects were first dated by radiocarbon dating when present; however, most items were dated through their typology. To keep in accordance with Champion et al.'s (2001) *Understanding the British Iron Age: An agenda for action* framework for cohesive dating methods throughout Britain, carbon-dating and typologies were the two methods applied.² The radiocarbon dates used for the study were sourced from previous object studies, and the majority of object dates based from typologies were provided by museum database records.

Objects that lacked a carbon date or typology but were confirmed by archaeological authorities to be from the Iron Age were provided with a broad 'Iron Age' period applicable to that region. Dates were essential for the analysis because they provided a comparison of object types throughout the Iron Age period and identified potential trends within the wetland depositional traditions. However, the lack of radiocarbon dates and an over-reliance on typological chronologies has led activity to be reflective of manufacture periods. As a result, the period between manufacture and deposition is, unfortunately, unknown.

Regional and sub-regional comparisons were performed from the amalgamated database for the reanalyses of Iron Age wetland depositional traditions in Wales and Scotland. These analyses were performed to test for repetition of activity or patterns in the data acquired. It is understood that these statistics are subject to change

as more material is found and catalogued. Analyses were performed for common trends in wetland landscape location, depositional tradition, object and material types, typological-chronological sequence, method and dates of discovery. It was essential to examine the sub-regions first because of the expected variation within each area before an overall comparison was performed.

As previously stated, this study contains inherent biases. Included in these biases are modern collection and record methods, discovery date of the finds, environmental survival rates, human environmental impact (i.e. drainage and urbanisation), and curation and subsequent study. Due to the inherent biases prevalent in the dataset prior to this study, inferential statistics were ill-suited for analysis. As a result, summary statistics were used for most of the analyses because it allowed for a more cautious, exploratory approach, considering the inherent biases in the data. As the data set suffers various biases (e.g. landscape accessibility, preservation conditions, weather, funding, survey performance, technology, how and who found the objects, formal training, coordinates, and archive records), enforcing a 'p' value as an index of causality would be dangerous because of the likelihood of projecting false significance on minor trends.

The effort to catalogue all Iron Age wetland objects recorded in museum collections, digital archives, and archaeological unit records was ambitious because museums may or may not have been able to help due to: COVID 19 restrictions, a lack of funding resulting in staff shortages or an inability to digitise archives, privatised collections, time schedules, and backlogs. Additionally, there is a recognition that there is a large gap in the data for the Northeast sub-region of Scotland, as there are hundreds of wetland artefacts in curation, but whether they are from a depositional landscape or not is still unknown. Likewise, not all objects were or could be dated and often lack an in-depth description of environmental context. These limitations created issues during analysis, as many of the data entries only contained a generic 'prehistoric' label or had an incorrect period assigned. Descriptions of a 'wet' environment, or no mention of the context, did provide a noticeable gap in knowledge. As a result, objects with broad categorisation or environmental descriptions have gone under the radar when considering a wetland environment. Comparison of the prehistoric and modern survival of wetlands was conducted via GIS, along with environmental studies of the area and farming accounts of large-scale drainage operations in certain locations.

Due to the restrictions implemented by COVID-19, further extraction of either digital or physical object records for 2020, in-person analysis and object handling was rendered impossible. Additionally, museums throughout the United Kingdom were mandated to be completely close to the public, only allowing facility access to essential staff, directly impacting database backlogs and digital record updates. Nevertheless, curators and authoritative individuals within these organisations did their best to

² While this agenda is 20 years old, and therefore slightly dated, a new agenda has not been put forward for Iron Age Britain.

answer questions and send what information and literature they could on certain pieces of the known collection. Thus, the collected object records are limited to discovery dates up to 2019. These actions resulted in a more comprehensive understanding of British wetlands, the history of wetland archaeology, and Iron Age deposition practices because the project collected object records from museums, online databases, heritage trusts, and archaeological units. A holistic approach, such as the one proposed here, has yet to be accomplished for prehistoric wetland depositional studies in Britain. However, there are limitations to the information provided in certain records, which have created an unbalanced account of pieces dating to the Iron Age.

This mainly desk-based study successfully provided new information and confirmed pre-existing theories of wetland deposition based on curated site reports. The amalgamation of mega data with findspots that were considered isolated or separate from settlement and production sites presented a more conspicuous classification of the deposition traditions in Wales and Scotland during the Iron Age. The methods and materials used allowed for a holistic review of wetland depositional activity in regard to period, landscape, object and material type, and rediscovery.