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Neolithic Crannogs in the Outer Hebrides (and Beyond?): Synthesis, Survey, and Dating

By STEPHANIE BLANKSHEIN[1], ANGELA GANNON[2], DUNCAN GARROW[3] *and* FRASER STURT[1]

In this paper we present a three-stranded investigation of all 'archaeological islands' (including crannogs) across Scotland, with a particular focus on the Outer Hebrides. The first strand is a synthesis and critical review of the archaeological record relating to 582 'archaeological island' sites. This research enabled us to characterise the nature of any previous work (including dating evidence) undertaken on each, and thus to establish the first ever open access, holistic, accurate dataset of these sites. The second strand is new underwater survey carried out at 30 archaeological islands across the southern Outer Hebrides. This enabled us to acquire further information about and dating evidence for these sites; notably, this included new evidence for Neolithic occupation on three, increasing the total of known Neolithic islets in the region to 11. The third strand involved a thorough re-assessment of a wide body of archaeological literature relating to early excavations and finds. This research identified potential Neolithic material culture on a further 15 archaeological islands across the rest of Scotland. We conclude by discussing the potentially very significant implications of this early material, considering the possibility that crannogs could have been constructed in the Neolithic beyond the Outer Hebrides.

Keywords: Neolithic, crannog, archaeological island, Scotland, underwater survey

> 'As in the case of stone axes, flint implements have occasionally been found in crannogs and brochs along with Iron Age relics. These, however, seem to belong to an earlier period, but having been picked up and found suitable for certain purposes, were made use of in later times . . .'. (Callander 1931, 105)

The quote above is notable not just for the simple point it makes – that Neolithic artefacts had been found on multiple crannogs – but for the renown of the site that Callander's comparative reasoning was helping to misdate: Skara Brae, now of course one of the most recognisable Neolithic sites in Europe. Callander's point was that, since Neolithic material had been found on crannogs and brochs which were then 'known' to be Iron Age in date, the same could apply to Skara Brae. At the time, the date of Skara Brae was under debate. The chronology of Grooved Ware pottery had not yet been fully established and many stone axes and flint and chert artefacts had been found there; equally, several diagnostically Iron Age artefact types, 'typical broch relics', were missing (Callander 1931, 103). However, to Callander, the impressive stone architecture of Skara Brae was so closely comparable with brochs, and of a suitably civilised character, that – having considered arguments both in favour of and against a Neolithic and/or Iron Age date – he ultimately felt compelled to attribute the site to the Iron Age (Callander 1931, 103–5). It is likely that Callander's argument may even have influenced Skara Brae's excavator, V. Gordon Childe who, against his earlier well-judged reasoning that it dated to the

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Stone Age (Callander 1931, 103), infamously ended up titling his report 'Skara Brae: a Pictish village in Orkney' (Childe 1931; Trigger 1980, 81).

In this paper, we outline a substantial recent research programme focusing on 'archaeological islands' (see discussion below for a definition) across the whole of Scotland, with a particular focus on the Outer Hebrides. Unlike Skara Brae, many of these sites have *correctly* been attributed to the Iron Age or medieval periods on the basis of artefactual evidence and/or radiocarbon and dendrochronological dating (Crone 2012). However, in the past and arguably up to the present day, people have perhaps been too ready to assign an Iron Age or later date to all archaeological island sites, assuming that we 'know' their origins. As we explore in further detail below, Neolithic artefacts from crannogs and other archaeological islands can no longer be dismissed or ignored.

DEFINITIONS

Archaeologists have debated exactly how 'a crannog' should be defined for many years and it has proved difficult to reach consensus (see, for example, Morrison 1985; Henderson 1998; Dixon 2004; Cavers 2012). Henderson and Sands suggested that 'crannog' is generally used as 'a portmanteau term to simply refer to all forms of artificial islands found in Scotland and Ireland' (2012, 269). However, as we discuss in detail below, the term has not been applied uniformly to all such sites in Scotland, with others such as dwelling, fortified island, artificial island, [island] dun, or broch used to describe directly comparable sites. Equally, there have been debates about whether a crannog needs to be wholly artificial or just partly artificial and whether sites built on natural islands should be treated differently (or not). In addition, during our critical review of all archaeological island sites in Scotland, it became clear that, in many cases, it simply was not possible to tell how a given islet had been constructed (sometimes even despite underwater investigation). Given these significant complexities of definition (both historical and contemporary), we opted for an inclusive approach, including all archaeological island sites in our dataset. Our decision-making processes relating to this category are set out in detail below.

For various reasons, crannogs also generally prove difficult to date straightforwardly: as a wide-ranging 'class' of site they originate in different periods; they were often inhabited and used across multiple periods; only a small percentage (15%) of the nearly 600 sites have seen excavation of any kind; many were dug in the early days of archaeology, meaning that records of their excavation are not always of the highest quality; only 26% have dating evidence of any kind. Crucially, of those sites which have been dug, almost none has seen excavation down to the lowest, and therefore earliest, layers. Despite Armit's seminal discovery of Neolithic occupation on Eilean Domhnuill in the 1980s, it is only in the past decade that the widespread presence of Neolithic islets (in the Outer Hebrides) has been recognised at all (Garrow & Sturt 2019a). The Canmore definition of a crannog – 'an island, partly or wholly artificial, often formed by dumping timber, earth and stones and revetted with timber piles or a palisade. Built in a loch, wetland or estuary and *dating from prehistory to medieval*' (Canmore nd, our emphasis) – perhaps sensibly remains chronologically vague.

CRANNOGS: A BRIEF HISTORY OF INVESTIGATION

This section is not intended to be a detailed, holistic account (for which see, for instance, Morrison 1985; Dixon 2004; Midgley & Sanders 2012b) but simply to give readers a broad sense of the history of crannog research. Crannogs in Scotland were noted in 18th and 19th century records, primarily in the *Old and New Statistical Accounts of Scotland*. Especially following on from the remarkable discovery of *keltischen pfahlbauten* (pile dwellings) in Switzerland in 1853 and 1854 (Ismail-Meyer *et al*. 2013), Scottish antiquarians became curious about lochs in their own country, many of which contained structural remains on islands not dissimilar to the structures being found on the European mainland. Following on from these continental discoveries, Robertson (1862) delivered a paper to the Society of Antiquaries of Scotland on several 'artificial or stockaded islands', marking the first systematic study of artificial islands as a site type in Scotland. Although this notice was not printed in the *Proceedings* as Robertson wished 'to avail himself of several important additions to his collections relating to these ancient remains' (1862), the attention this new class of site would attract was immediate, with a number of sites explored over the next few years (eg, Mackinlay 1862; Simpson 1862; Grigor 1864; Stuart 1866). This increasing antiquarian interest was largely possible due to the 'Improvement' period in Scotland when hundreds of lochs were drained across the country and the artificial nature of many unassuming islands was

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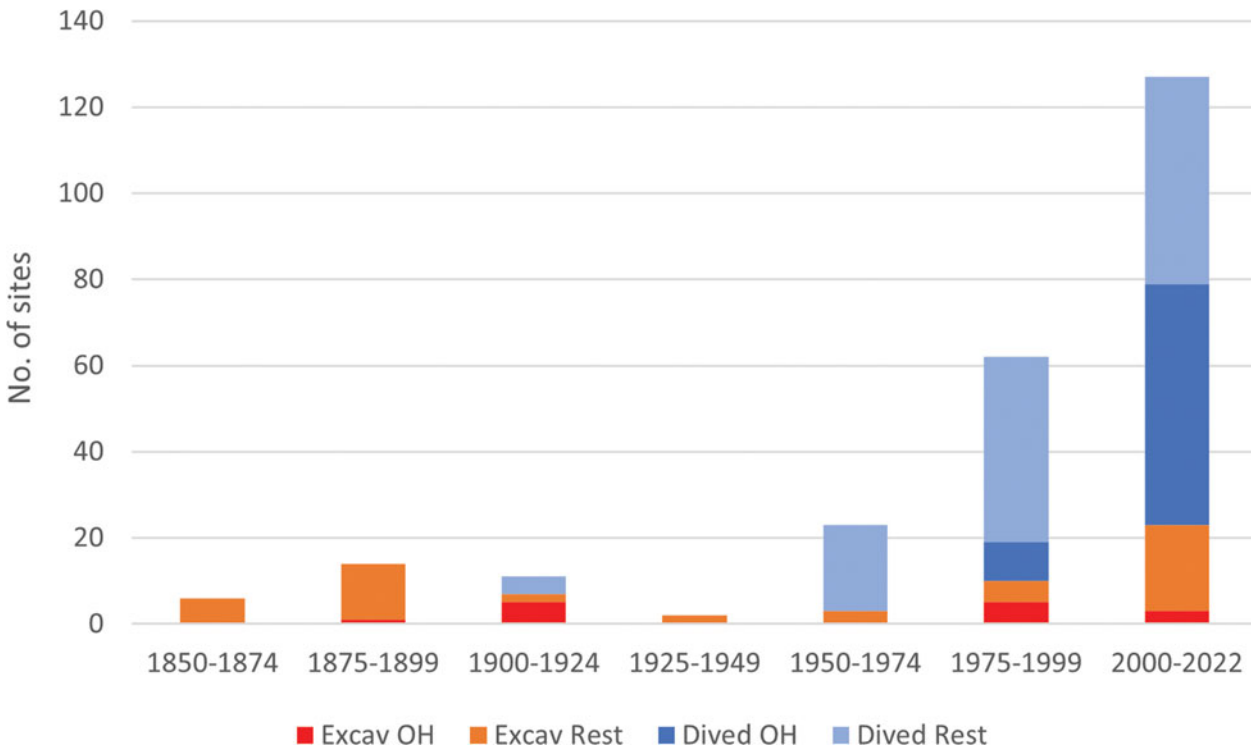

Fig. 1.
Archaeological island excavations and dive surveys through time, in the Outer Hebrides and the rest of Scotland

dramatically revealed. What followed was a period of extensive and intensive investigations.

These early investigations were shaped by Dr Robert Munro who would become a prolific Scottish crannog researcher at a time when antiquarians were laying the foundations for modern archaeological practice. Munro excavated and examined many Scottish crannogs as well as conducting broader studies of pile-dwellings throughout Europe. Much of his work was published in the *Proceedings of the Society of Antiquaries of Scotland* and conveyed in two book-length publications: *Ancient Scottish Lake Dwellings* (1882a) and *Lake Dwellings of Europe* (1890). His contribution to Scottish crannog studies has been profound (see papers in Midgley & Sanders 2012a) and has lasted up to the present day.

Whilst drainage works allowed for the investigation of many sites during the late-19th and early-20th centuries, it was not until 1908 that crannogs were investigated underwater through the use of a 'diving-dress'. Reverend Odo Blundell examined Eilean Muireach, or Cherry Island, in Loch Ness using a diving suit borrowed from the Clyde Diving Trust. Blundell's (1909) notice of this investigation is remarkable in that it provides not only a highly engaging account of one of the first underwater archaeological investigations in the world but also the first description of a crannog underwater. Overcoming the challenges of working with people inexperienced in supplying air to a dive dress, Blundell was able to observe the site's foundations, providing a description of the interface between the artificial structure and the loch bed, a feature integral to understanding the origins of these structures, and one that is hard to observe when approached from the top-down.

These early explorations led to the recovery of a vast quantity of archaeological material and much information yet, following on from the work of Blundell and Munro, and just as the discipline of archaeology was being formalised and systematised, Scottish crannog research began to lull. Only five sites were excavated between the 1920s and 1970s (Fig. 1; Dixon 2004, 47), although a large number were surveyed by the RCAHMS and Ordnance Survey in

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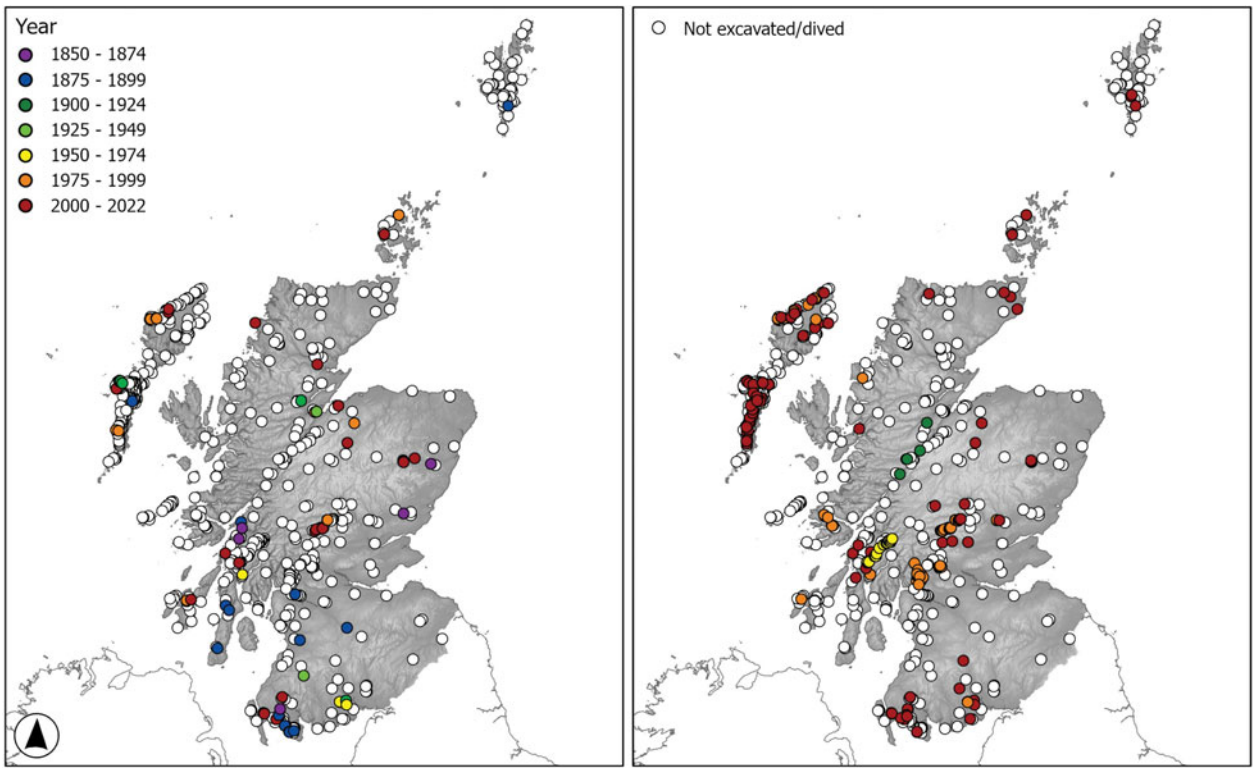

Fig. 2.
Graphical representation of the history of archaeological island fieldwork in Scotland (left: excavation; right: dive survey). Data from Islands of Stone database

the 1960–70s. The first underwater inspection of a crannog since Blundell's intrepid investigations in the early 20th century occurred in Loch Awe in 1972. Subsequent surveys led to the identification of 20 crannogs in that loch alone (McArdle & McArdle 1973) and, soon after, 17 crannogs were surveyed in Loch Tay (Dixon 1981). Since that time, many projects have been established (Figs 1 and 2), focusing on particular lochs or regions (eg, Loch Lomond Islands Survey, South West Crannog Survey, Caithness Crannog Survey, Orkney Crannog Survey, Perthshire Crannog Survey, Living on Water: Loch Tay's Early Iron Age Crannogs). Similarly, a sizeable number of doctoral theses relating to crannogs have been undertaken (eg, Dixon 1984; Crone 1988; Miller 1997; Holley 1998; 2000; Hale 2000; 2004; Cavers 2005; 2010; Lenfert 2012; 2013; Fonville 2015; Stratigos 2017). This very substantial body of work has been hugely important in terms of advancing our understanding of crannog sites. However, with no overall synthesis undertaken and made publicly accessible, this knowledge has remained somewhat piecemeal and fragmented.

Recent 'archaeological island' research in the Outer Hebrides

The Outer Hebrides contain the densest distribution of archaeological island sites in Scotland with 197 known, compared to 385 across the rest of the country. Despite this, relatively few had been explored archaeologically prior to the 1980s: only seven had been excavated before then, five of these the result of Beveridge's (1911) concerted efforts to investigate archaeological sites in North Uist during the early 20th century. Especially notable in this context is Eilean an Tighe, discovered by Beveridge and excavated by Scott in 1937 (Scott 1953), which represents the first Neolithic archaeological island identified in the Outer Hebrides – a probable settlement located on a clearly natural island in North Uist.

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Since the late 1980s, however, archaeological islands in the region have been subject to intensive research involving detailed desk-based assessments, substantial numbers of diver and shoreline observation surveys, and a handful of excavations. This period of focused investigation began with Dixon and Topping's (1986) 'preliminary survey of later prehistoric artificial islands on the Isle of Lewis'. They clearly felt thwarted in their dive survey work by poor through-water visibility and their published report is very vague on detail. They appear to have dived at least six sites (Dixon & Topping 1986, 191–2) and visited 18 more, several of which turned out to be natural islands with no trace of archaeology (Dixon & Topping 1986, 193–4). That same year the first combined terrestrial and underwater excavation of an archaeological island or island dun was conducted at Dun Bharabhat (Harding & Dixon 2000). Parallel excavations were also carried out at an adjacent island dun, Loch Na Berie, now on marshy ground (Harding & Gilmour 2000).

Shortly after this work, Armit began his now iconic excavation at Eilean Domhnuill in North Uist. Having set out to investigate the relationship between two closely situated, presumed Iron Age sites, Eilean Olabhat and Eilean Domhnuill, it soon became clear that the latter islet actually contained a long-term sequence of Neolithic buildings that produced very substantial amounts of material culture (Armit 1986; 2003; Copper 2015). The identification of a substantial Neolithic artificial island site led many to speculate that further crannogs of that date might exist (eg, Crone 1993, 248; Henderson 1998, 229; Cavers 2010, 42).

Alongside Raven's doctoral research into medieval landscapes and lordship in South Uist (2005), Raven and Shelley (2003) surveyed a total of 28 island duns in Benbecula and South Uist in 2001–2003. Their field surveys consisted of shoreline observation and, where the opportunity allowed, snorkel/SCUBA survey (an estimated 22 of the 28 sites – John Raven pers. comm.). While their primary research focus was the medieval use of archaeological islands, they recorded all relevant information about sites they visited. A few years later, Rennell (2009) visited 201 Iron Age sites for her doctoral thesis on the landscapes of everyday experience in the Outer Hebridean Iron Age and an extensive database of sites and their settings (many of which are island duns/brochs) was generated.

Building up from this disparate basis of investigation, Lenfert's (2012) doctoral thesis investigated crannogs in the Outer Hebrides (and further afield) in substantial detail. Lenfert argued, quite rightly, that 'island dwellings' (the term he favoured), particularly in the Outer Hebrides, had not previously been subject to coherent classification or investigation. In looking at directly comparable sites which had been termed variously as 'crannog', 'dun', 'island dwelling', 'fortified island', and 'artificial island' (Lenfert 2012, 3) and investigating them as a whole, Lenfert's impressive body of work did a great deal to clarify their character and distribution (see also Lenfert 2013). His fieldwork in 2009 and 2010 involved 'visual inspection of 47 reported or unconfirmed islets (primarily on North Uist, Grimsay, Benbecula and South Uist)' (Lenfert 2012, 265), ranging from site visits and shoreline assessments to in-loch dive surveys. Lenfert recovered Iron Age pottery from three sites (2012, 315–23).

Following on from Lenfert's work further south, local resident and former Royal Navy diver Chris Murray and then conservation officer at Museum nan Eilean, Stornoway, Mark Elliott, carried out an extensive campaign of dive surveys in the Isle of Lewis from 2012 onwards (Benjamin *et al.* 2014, 404; Sheridan *et al.* 2014; Garrow & Sturt 2019a). This built on Murray's initial identification of substantial quantities of Neolithic pottery at one islet site, Loch an Duna, which represented a dramatic new addition to the single, previously known Neolithic artificial islet at Eilean Domhnuill. Murray and Elliott's subsequent dive-led investigations at 18 sites was highly successful, identifying five more archaeological islands associated with sometimes very substantial quantities of Neolithic material (Garrow & Sturt 2019a; see also below).

THE 'ISLANDS OF STONE' PROJECT

The 'Islands of Stone' project from which this article stems was initially set up in 2015 to establish in more detail the character and distribution of Neolithic archaeological islands in the Outer Hebrides. Following on from Murray and Elliott's hugely significant discoveries, we initially undertook dive survey work on three sites in Lewis (Garrow & Sturt 2019a), followed by excavations at Loch Langabhat (in 2017) and Loch Bhorgastail (in 2021 and 2023) (Blankshein *et al.* 2022). As outlined in detail below, other key aims of the project were to investigate whether more Neolithic archaeological island sites

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Table 1. Summary of sites within our archaeological island dataset

	Outer Hebrides	*Rest of Scotland*
Sites in 'cleaned' dataset	197	385
Sites (quality 1 = very good confidence level)	162	363
Sites (quality 2 = medium confidence level)	35	22
Sites (quality 3 = uncertain confidence level)	87	36
Sites dated by material culture	33	45
Sites dated by radiocarbon	21	72
Sites dated by architecture	28	37
Sites surveyed	155	232
Sites excavated	15	51
Sites dived	65	115

could be found right across the Outer Hebrides, and to collate information about archaeological islands across the whole of Scotland, evaluating the possibility that some of these sites might also have Neolithic origins (Table 1).

DATABASE OF 'ARCHAEOLOGICAL ISLAND' SITES

The fragmented and at times confusing nature of the record relating to crannogs (and related sites) – particularly in terms of (a) their classification in the National Record of the Historic Environment and in regional Historic Environment Records (NRHE/HERs), and (b) the disparate but substantial body of work carried out on them, both historically and recently – suggested to us that a database of archaeological island sites across the whole of Scotland would benefit not only our own project but future researchers as well.

In order to draw up a list of all relevant sites, our initial starting point was the NRHE/Canmore. As set out above, the terminology used to describe 'crannog' sites is highly variable, while definitions as to what a 'crannog' is, or should be, also vary. For this reason, broadly following Lenfert (2012), we adopted an inclusive approach, using the term 'archaeological island' to describe the sites we were interested in. This category includes all islets that have archaeological features or other anthropogenic evidence, regardless of their artificiality or period (Fig. 3). In order to collect

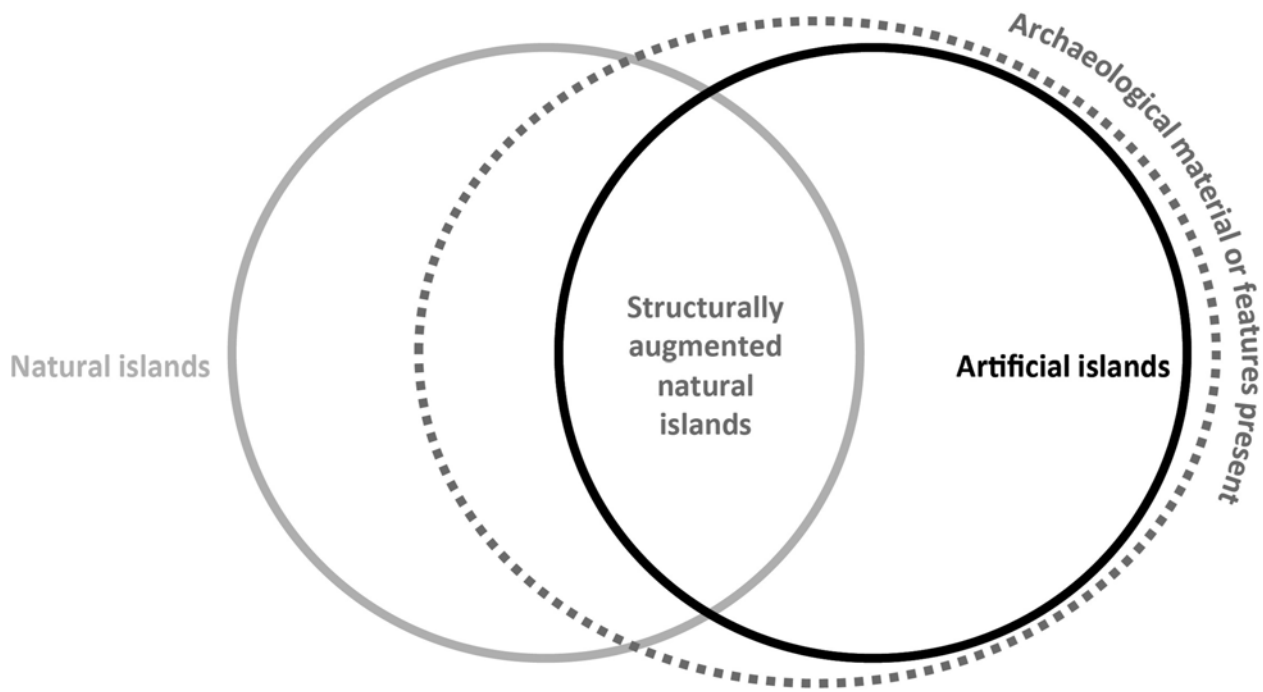

Fig. 3.
Schematic representation of the relationship between crannogs, archaeological islands and natural islands as defined within this paper. Crannogs are contained within the black circle, archaeological islands by the grey dashed line

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information about all relevant sites, those previously classified as crannogs, artificial islands, island dwellings, fortified islands, causeways, duns, and brochs (the latter two filtered to include only those built on islands) were included in our search. This primary database was then cross-referenced with those generated through other relevant research projects (eg, Holley 2000; Cavers 2010; Lenfert 2012; Stratigos 2021); any additional information that could be extracted was recorded, and new sites added and/or flagged for further investigation. The database recorded each island's location, setting, structural materials, recovered artefacts and materials, radiocarbon or dendrochronological dates, previous research conducted, and all publications or reports referring to the site. We also assigned a numerical scale of confidence to each site (1 = high confidence as to the existence/location of archaeological island; 2 = medium confidence; 3 = low confidence). Our ultimate goal was to identify and collect in one database all available information about archaeological island sites across the whole of Scotland.

The construction of a database of all archaeological islands has now unified a previously fragmented dataset. Our inclusive approach will enable future researchers to investigate 'crannogs' alone, but also to include other related site types if they so choose. In conducting a critical review of this dataset, removing sites erroneously included in the record, and flagging other levels of information quality and certainty as well (a substantial amount of work), we hope to have improved that record significantly. By including all relevant information relating to the date(s) of each site's phase(s) of use, where known, and about all previous types of investigation, we hope also to have solidified the basis on which all archaeological islands are understood. The database is available open access via the Archaeology Data Service: https://doi.org/10.5284/1100101. At the end of the project, we also hope to update the NRHE/Canmore with relevant enhanced information.

NEW FIELDWORK IN THE OUTER HEBRIDES

Background

The Islands of Stone project has three fieldwork streams. The first is underwater and terrestrial excavation of one site, Loch Bhorgastail, in substantial detail (Blankshein *et al.* 2022 and publications in preparation). The second is detailed landscape survey around all known Neolithic islet sites. The third is underwater survey designed to establish whether further Neolithic archaeological islands exist across the southern part of the Outer Hebrides (as set out above, the presence of Neolithic archaeological islands further north has already been well established). We summarise the third stream in this paper.

In total, 144 sites of initial interest in North Uist, Benbecula, South Uist, and Barra were identified within the preliminary, not-yet-cleaned archaeological island dataset acquired directly from Canmore (as set out above). The next step was to undertake site visits to assess as many as possible of these on the ground. Absolutely vital to this stage of the work was our collaboration with the Uist Community Archaeology Group (UCAG), who visited 114 sites in total, recording the archaeology in detail (Blankshein *et al.* 2023a). Following on from this phase, since we were primarily interested in artificially constructed islet sites of Neolithic origin and not in all archaeological islands, we were able to remove 49 natural islands from our preliminary shortlist. This left us with a sub-total of 95 archaeological island sites of potential interest. As this was clearly too many sites for us to dive in four weeks, we needed to refine the list further to target our fieldwork.

The process of deciding which sites were most likely to be Neolithic in origin was not straightforward. We already knew from Murray and Elliott's fieldwork that, in some cases, archaeological islands which clearly had later phases of occupation, including in some cases significant architectural alterations, had produced Neolithic material and thus must have had Neolithic origins. Those sites in Lewis that we ourselves had worked on in more detail – and which had produced *only* Neolithic material – were small, simple, cairn-like structures. It seemed possible that the former category were initially constructed in this form as well. On this basis, we took the decision to focus our next phase of work only on sites which did not have clear (presumed Iron Age or later) structures on top and which appeared relatively simple and small in their constructional form. The UAV photos taken by UCAG members as part of their survey work were invaluable in this regard since existing imagery (whether NRHE or satellite derived) was not usually sufficiently clear to be able to make any such judgements. Using this method of database refinement, we drew up a list of 20 sites to investigate in depth through dive survey.

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Fig. 4.
Aerial photos of the three archaeological islands which produced Neolithic material in 2022

In addition to our focus upon known archaeological island sites we also undertook extensive automated machine learning work to identify from satellite imagery potential artificial islet sites that were not already recorded in the NRHE/HER. Murray and Elliott's fieldwork had revealed a number of new sites that were not previously known (Garrow & Sturt 2019a, 667). The sheer quantity of lochs and islets in existence made it highly likely that further 'unknown' sites, which simply had not been observed archaeologically, were likely to exist. This process revealed a huge number (1907) of sites with archaeological potential, which was refined down to a shortlist of ten for further investigation in the field according to a series of factors including visual appearance, accessibility, and geographical location relative to other targeted sites (see Blankshein *et al.* 2023b for details).

Results

During four weeks of fieldwork in July 2022, we visited a total of 30 islets in 25 lochs. Each field visit involved snorkel and, if required, scuba survey around the islet by a team of five divers, supplemented by on-islet observations, UAV survey (photos/photogrammetry and sometimes LiDAR), and sidescan sonar/bathymetric survey of several lochs (see Blankshein *et al.* 2023b for details).

This phase of fieldwork proved highly successful in demonstrating the wider-spread presence of Neolithic archaeological islands and in dating phases of use on a number of other sites. We identified Neolithic pottery from three sites (Figs 4 and 5; Table 2) and recovered other dating evidence (including pottery and radiocarbon dated organics) from ten others (Blankshein *et al.* 2023b). The first site to produce Neolithic material, Loch nan Clachan, North Uist (Canmore ID 10094), was located just 2.5 km from Eilean Domhnuill, indicating – as already observed in Lewis – that these sites were, at times, constructed very close to one another. The second, Kildonan Mill Loch (9846), and third, Tobha Beag (Eilean an t-Sagairt) (270753), were both located much further to the south in South Uist, considerably extending the known distribution of Neolithic archaeological island sites in the Outer

Fig. 5.
Undecorated Neolithic vessel from Tobha Beag (270753). Image: Mike Copper

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Hebrides (Fig. 6). Sufficiently large assemblages of pottery immediately adjacent to the crannogs at both Loch nan Clachan (15 sherds from six vessels, 370 g) and Kildonan Mill Loch (87 sherds from 15 vessels, 1857 g) were recovered in a short space of time, suggesting the likelihood of substantial quantities of Neolithic material around both sites.

At Tobha Beag, the picture is slightly less clear. Only later, Iron Age material was recovered immediately adjacent to the archaeological island initially investigated (270754), but a substantial number of sherds from a single undecorated vessel (with distinctive everted with internal bevel Neolithic rim form; Fig. 5) were found 60 m away, adjacent to a second, larger island (270753). The latter is heavily overgrown and appears in aerial photos, from sonar imagery and visual inspection on site to be at least partly natural in origin, although a constructed causeway is visible extending out to it from a nearby peninsula (Fig. 4). It is worth noting that at least one natural island augmented artificially in the Neolithic, Loch Langabhat, is known further north in Lewis (Garrow & Sturt 2019b). Tobha Beag would benefit from more detailed investigation as the wider context from which this important Neolithic material was recovered is not at present sufficiently clear.

Summary

As a result of our collation of a large-scale, workable, critically reviewed and up to date dataset for all archaeological islands in Scotland, it became possible to understand fully the record in the Outer Hebrides, our area of specific interest. Targeted fieldwork there, first by our collaborators UCAG on the ground, and then by the Islands of Stone team underwater, has demonstrated the presence of archaeological islands with Neolithic origins across the Outer Hebrides. Eilean an Tighe was the first (natural) archaeological island site to be identified (Scott 1953). Eilean Domhnuill was, in turn, the first clearly artificially constructed site to be found (Armit 2003). Murray and Elliott's dive survey work in the 2010s identified five more sites in Lewis (Garrow & Sturt 2019a), to which an additional, recently discovered sixth site, Loch Marabhat (370585), can now been added. Our fieldwork in 2022 added an additional site in North Uist and two in South Uist. It should be noted that, as well as pottery recovered around them, three of these new sites also have timber architectural components dated to the Early Neolithic (Table 2). Eleven Neolithic archaeological islands are now known in the Outer Hebrides (Fig. 6, Table 2), and it is highly likely that there are more out there to be found.

ARCHAEOLOGICAL ISLANDS IN THE OUTER HEBRIDES AND THE REST OF SCOTLAND: A COMPARISON

Another advantage of having created an up-to-date database of archaeological islands, including any associated dating information for each site, is that it becomes possible to compare phases of use effectively, both overall and between the Outer Hebrides and the rest of Scotland (Figs 7–9). We have divided sites with known (or estimated) dates into those dated by radiocarbon and dendrochronology, those dated by material culture, and those dated by the architecture on top of the island. The latter category is, for obvious reasons, less certain, but it seemed to us mistaken to ignore architecture (eg, a circular broch-like structure, or medieval castle-like walls) entirely where sites had not been dated by other means. Our time brackets have been kept deliberately broad because the material culture used to date these sites was often itself vaguely classified (eg, 'Iron Age' pottery) and also in order to enable the different chronological periods/dates in the Atlantic region and in the rest of Scotland to be depicted together. It should be noted that, at present, no archaeological islands have been identified as having been constructed during the Late Neolithic or Early Bronze Age (*c.* 3000–1500 BC), although lithics of this date have occasionally been found (see below). Where a single site produced dating evidence for more than one phase, it has been counted for *each* phase in Figures 7 and 8. Where a phase on a site has been dated by more than one category of evidence (eg, radiocarbon dates and pottery), it has been counted only once (within the most definitive category, ie, usually radiocarbon dated).

The presence of Neolithic and, increasingly, also Bronze Age dates from archaeological islands in the Outer Hebrides is clear to see in Figure 7. Interestingly, the proportion of securely dated sites within each of the subsequent phases are approximately the same in both regions. The relatively high proportion of 800 BC–AD 900 sites dated by radiocarbon in the rest of Scotland is also noticeable, a clear reflection of the large-scale analytical programmes recently undertaken on sites primarily of that date. Interestingly, despite the variable histories of research in each region (as

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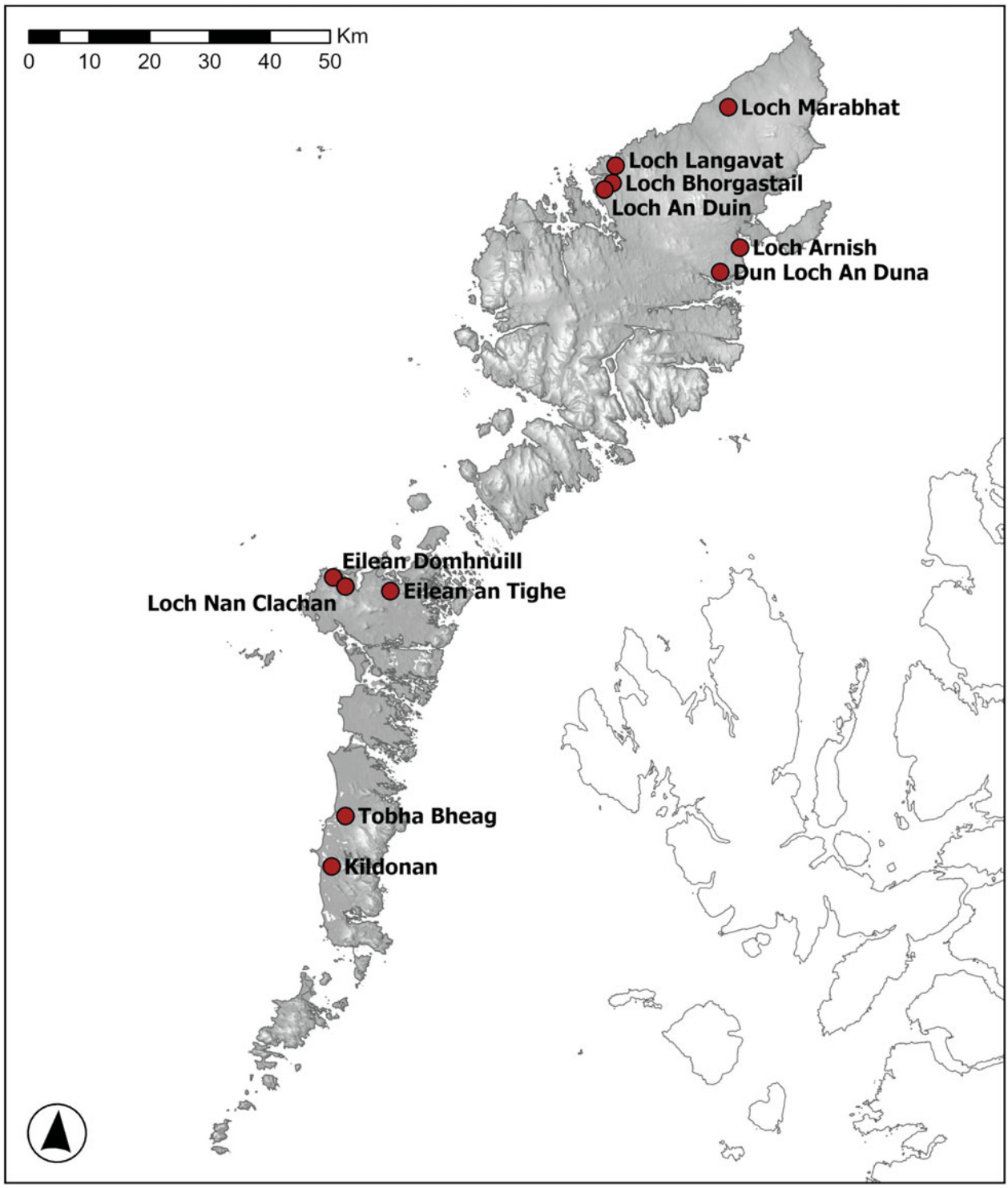

Fig. 6.
Locations of the eleven Neolithic archaeological islands identified so far in the Outer Hebrides

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TABLE 2. ARCHAEOLOGICAL ISLANDS WITH NEOLITHIC EVIDENCE IN THE OUTER HEBRIDES

Site name	*Location*	*Canmore ID*	*Summary description*	*Reference*
Loch Arnish	Lewis	4316	Large number Neolithic vessels identified in loch around islet	Garrow *et al.* 2017
Loch Bhorgastail	Lewis	359072	Large number Neolithic vessels identified in loch around islet & in association with lower excavated layers on islet; timber architecture/layers radiocarbon dated to *c.* 3640–3360 cal BC	Blankshein *et al.* 2022
Loch Langabhat	Lewis	270908	Large number Neolithic vessels identified in loch around islet; small quantities also found during excavations on islet	Garrow & Sturt 2019b
Loch An Duna	Lewis	4227	Large number Neolithic vessels identified in loch around islet	Copper 2019
Loch An Duin	Lewis	4092	Single Neolithic sherd found in loch adjacent to island	Copper 2019
Loch Marabhat	Lewis	370585	Large number Neolithic vessels identified in loch around islet. Timber architecture/layer radiocarbon dated to *c.* 3510–3200 cal BC	Copper 2022
Eilean An Tighe	N Uist	10372	Large amounts Neolithic material culture found in association with buildings on island	Scott 1953
Eilean Domhnuill (Loch Olabhat)	N Uist	10069	Large amounts Neolithic material culture found in association with buildings on island	Armit 2003; Copper 2015
Loch nan Clachan	N Uist	10094	Large number Neolithic vessels identified in loch around islet. Timber layer radiocarbon dated to *c.* 3320–2920 cal BC	Blankshein *et al.* 2023b
Tobha Beag (Eilean an t-Sagairt)	S Uist	270753	Single Neolithic vessel found in loch adjacent to island	Blankshein *et al.* 2023b
Kildonan Mill Loch	S Uist	9846	Large number Neolithic vessels identified in loch around islet	Blankshein *et al.* 2023b

described above), the proportions of all sites dived and/or excavated are similar, although a slightly greater percentage of those in the rest of Scotland have seen excavation of some kind (Table 3).

NEOLITHIC MATERIAL CULTURE ASSOCIATED WITH ARCHAEOLOGICAL ISLANDS BEYOND THE OUTER HEBRIDES

> 'As for the stone weapons and the other relics … I ignored them altogether' (Munro 1899a, 7).

Following on from the natural island site, Eilean an Tighe, the first artificially constructed archaeological island definitively identified as Neolithic was, as we have seen, Eilean Domhnuill in the 1980s (Armit 1986). Work since 2012, first by Chris Murray and Mark Elliott and subsequently by the Islands of Stone team, has revealed nine additional sites across the Outer Hebrides (see Table 2), bringing the total of known Neolithic archaeological islands up to 11. It is now clear that artificial and enhanced islets were first constructed and used, on a widespread basis, during the Neolithic in that region. A key question that remains is whether Neolithic archaeological islands were a phenomenon limited only to this geographical zone. As discussed at the start of the paper, a central aim of the Islands of Stone project has been to assess the possibility that archaeological islands could also have been constructed during the Neolithic in other areas of Scotland.

In seeking to shed light on this question, it is highly revealing to revisit some of the work carried out by antiquarian researchers and early archaeologists, and indeed by some more recent projects, on archaeological islands elsewhere across Scotland. In our introduction, we touched upon one early 20th century mention of Neolithic material culture having been found generally on archaeological islands, in relation to Callander's (1931) erroneous dating of Skara Brae. The results of antiquarian and other early excavations have for some time often been dismissed as worthless (eg, Piggott 1953, 52). However, while excavation and recording practices may not have been up to modern standards, it is important not to ignore their findings altogether – these early interventions can

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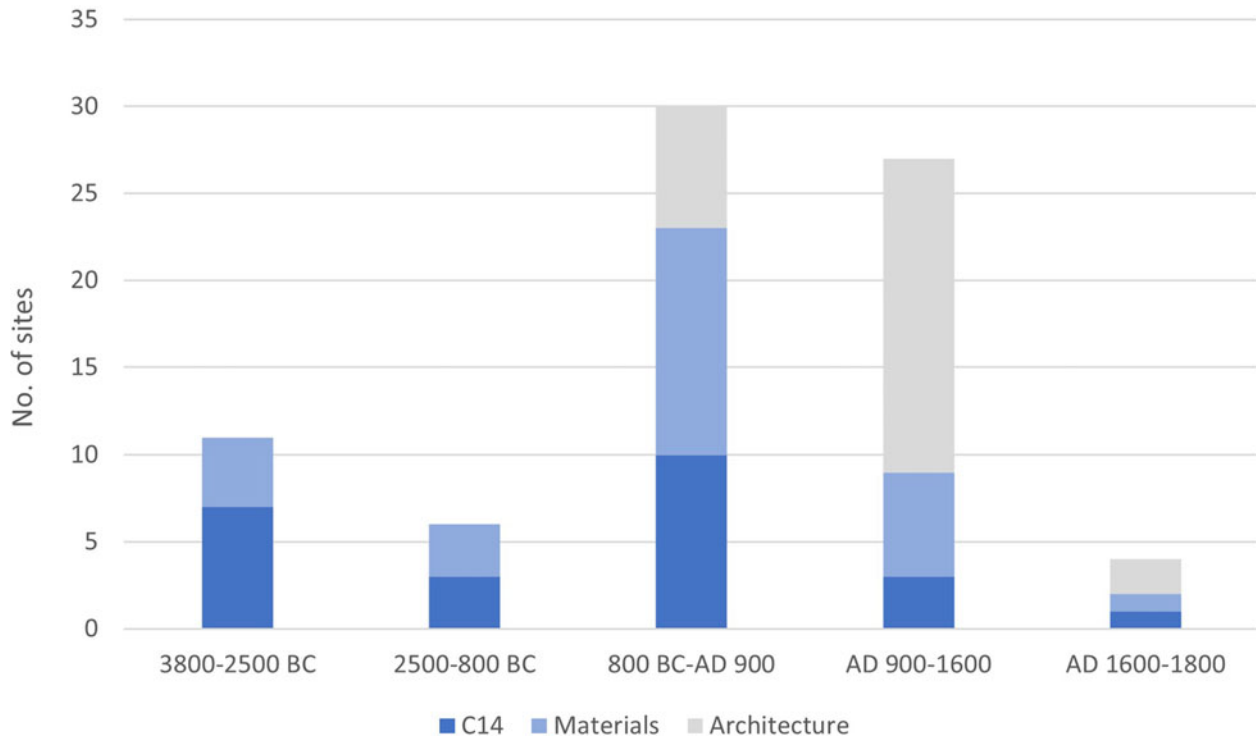

Fig. 7.
The dates of archaeological island use in the Outer Hebrides

provide us with vital information. Once we look in detail at old site reports and other sources, it turns out that Neolithic material culture has been found on other archaeological islands as well.

As we saw at the start of the paper, Callander was keen to dismiss the relevance of Neolithic material on the crannog sites he was aware of, viewing it as having been collected up and brought in from elsewhere. Interestingly, other scholars working in the late 19th and early 20th centuries had a similarly sceptical or dismissive attitude to such potentially 'early' finds. Robert Munro, a pioneering figure who looms large in the history of crannog research, appears to have been particularly keen to dismiss the validity of pre-Iron Age artefacts. For instance, following excavations at Lochlee and the recovery of numerous materials – including a polished stone axe, worked lithics, and cup-marked stones (as well as iron implements, jet ornaments, and samian pottery) – Munro was adamant that all seemingly Neolithic (or Bronze Age) materials had been found in the same context as iron objects: 'As many of the relics, if judged independently of the rest of their surroundings, would be taken as good representatives of the three so-called ages of stone, bronze, and iron, it is but natural for the reader to inquire if superposition has defined them by a corresponding relationship. On this point I offer no dubious opinion. The polished stone celt and the [iron] knife were found almost in juxtaposition about the level of the lowest fire-place' (Munro 1879, 247–8). Notably, this precise stratigraphic argument was used to dismiss those finds despite his earlier admission that the excavation had not preceded with sufficient care (Munro 1879, 183). Working at a depth of over 8 ft (2.4 m) in a waterlogged(?) trench only 4–5 ft (1.2–1.5 m) in breadth and bearing in mind that it was not Munro himself who was in the trench, any definitive statement as to these stratigraphic associations might be construed as a bold assertion.

Munro was a formidable character with the ability to make or break interpretations, as well as careers. Nowhere is this more evident than at the excavation of Dumbuck crannog on the River Clyde. Today, the site is mired in controversy due to a number of forged artefacts recovered during excavations in the late 19th century (Hale & Sands 2005). Strangely shaped stone

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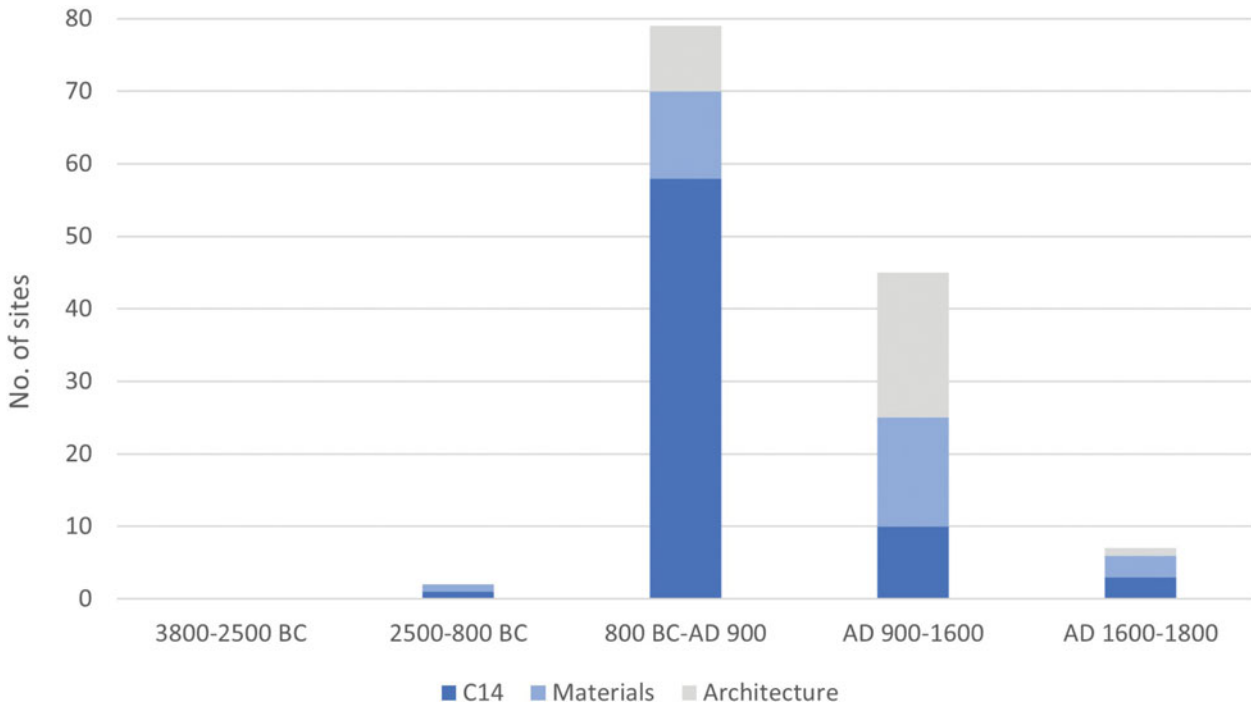

Fig. 8.
The dates of archaeological island use in the rest of Scotland

objects and figurines carved in shell were recovered (Bruce 1900) and displayed for visitors amongst other finds. Following a visit to the site in 1898, Munro (1899a) wrote in the *Glasgow Herald*: 'As for the stone weapons and the other relics in the case I ignored them altogether, stating that, in my opinion, they were not productions of the people who constructed and inhabited this strange place'. This dismissal of many of the lithic finds from Dumbuck crannog was, in turn, rebutted by the excavators, leading Munro to publicly insinuate that it was the excavators themselves who were guilty of forgery and a very heated public debate (Hale & Sands 2005, 50–1). Where the controversial forged objects came from and who deposited them around the site remains a mystery, especially given how deeply embedded they were within the stratigraphy (Bruce 1900). Regardless, the message was clear: you do not challenge the interpretations of Dr Robert Munro. As Dixon has stated, Munro 'was so commanding in the field that his construction sequences, right or wrong, have survived until today' (2004, 46). Munro's attitude to Neolithic and Bronze Age finds from crannogs has arguably also had a long-lasting influence up to the present day.

In addition to Callander's assertion about their general presence, the snippets from Lochlee and Dumbuck above represent more specific examples of possible Neolithic (and/or Bronze Age) artefacts having been recovered from archaeological islands. In the following section, we outline a further batch of evidence for similar 'early' artefacts on archaeological island sites. As part of a large-scale data mining exercise designed to uncover further evidence to include in our database, we undertook computer-led analysis of digital versions of all past issues of both the *Proceedings of the Society of Antiquaries of Scotland* (148 volumes) and *Discovery and Excavation in Scotland* (71 volumes), along with the 'Notes' area of Canmore (around 788 site records). Our initial automated analysis focused on identifying all articles mentioning 'crannog' and related nomenclature. We then followed up this process with researcher-led, qualitative investigation of each highlighted report. Amongst much other useful information, this led to the identification of possible Neolithic or Bronze Age lithic material from 15 archaeological islands in total, 14 from the 'rest of Scotland' and one additional site in the Outer Hebrides (Table 4; Figs 10 and 11). A few

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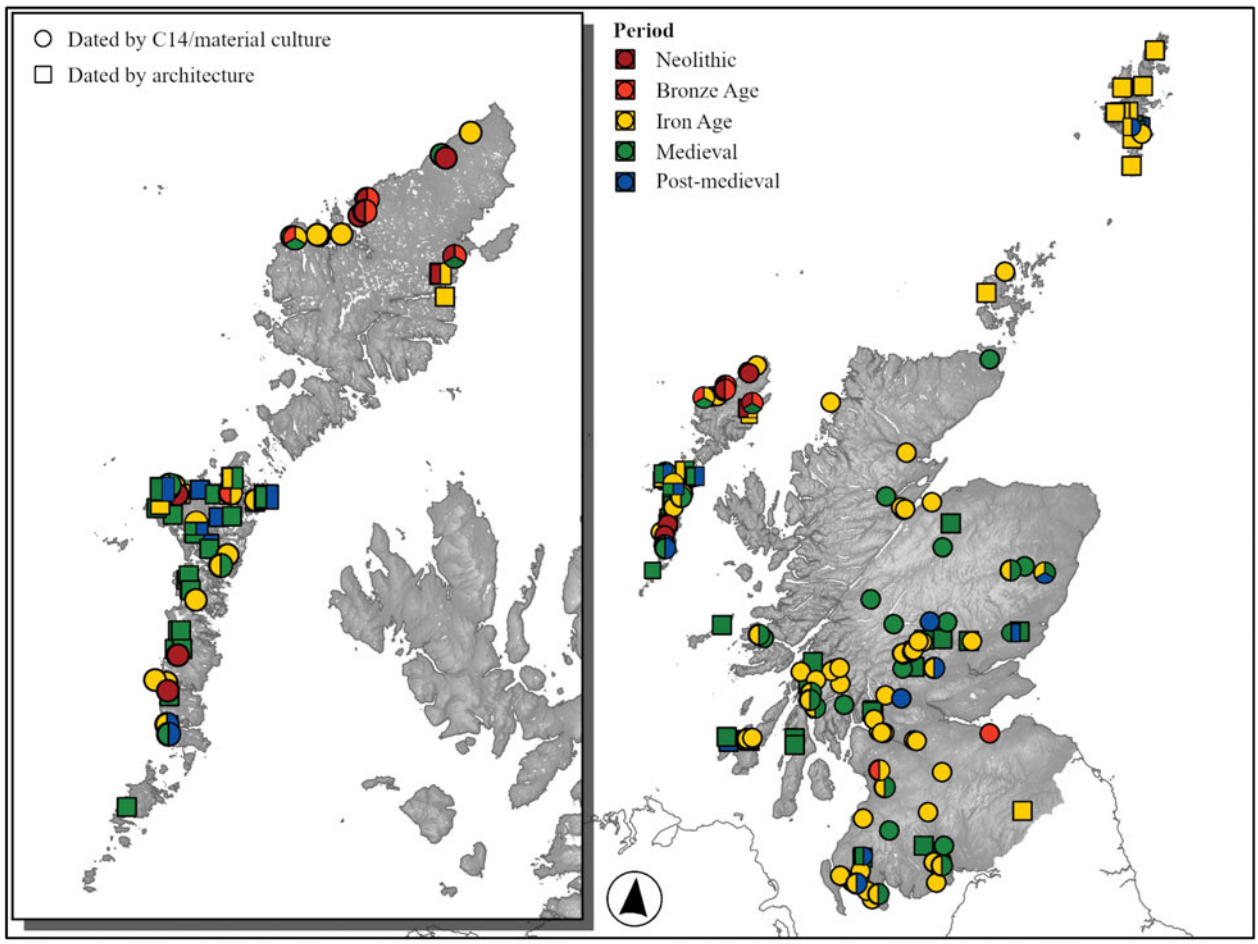

Fig. 9.
Distribution of dated archaeological islands across Scotland

reports of potentially interesting pottery finds, including some vessels found on the loch bed, were also noted but, despite follow-up investigations, it has not been possible to demonstrate conclusively that any of these were necessarily 'early'.

As might perhaps be expected, the lithics from archaeological islands set out in Table 4 are varied and have been dealt with by the sites' excavators in various ways. Six sites produced single items (including polished axes), five produced a small number of flints, while three produced large quantities of lithics. The latter category includes the sites of Finlaggan, Islay and Buiston and Donald's Isle, both in Ayrshire.

At Finlaggan, Hardy noted a substantial assemblage of 619 pieces of worked flint and quartz, plus a polished stone axe, recovered from medieval occupation layers on a small circular islet and larger natural island nearby, as well as numerous other lithics associated with a natural mound on the adjacent shoreline (Hardy nd; Saville nd; David Caldwell pers. comm.). Of the diagnostic pieces found across the entire lithic assemblage, Mesolithic tools (microliths and associated waste flakes and microburins) were dominant. An Early Neolithic leaf-shaped arrowhead and a polished axe, as well as

Table 3. Number of archaeological islands dived/excavated in the Outer Hebrides and the rest of Scotland

	Sites	*Dived*	*Excavated*
Outer Hebrides	197	65 (33%)	15 (8%)
Rest of Scotland	385	115 (30%)	51 (13%)

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TABLE 4. SUMMARY OF LITHIC FINDS ON ARCHAEOLOGICAL ISLANDS ACROSS SCOTLAND

Canmore site name	*Council*	*Canmore ID*	*Object(s)*	*Description*	*Main reference*
Lochlee	S Ayrshire	42841	Axe + flints	Polished stone axe found in lower layers; flint scraper, blade & flake also found during excavations in 1870s	Munro 1879, 183, 208, 211
Islay, Loch Finlaggan, Eilean Na Comhairle	Argyll & Bute	37691	Axe + flints	Polished stone axe & numerous other flints found in later occupation layers, during excavations in 1990s	David Caldwell pers. comm.; Hardy nd
Loch Doon, Donald's Isle	E Ayrshire	63590	Flints	'Upwards of 120' flint & chert flakes & chips found during excavations in 1933–6	Fairbairn 1937, 328, 331
Buiston	N Ayrshire	42950	Flints	Flint 'knife', 2 scrapers, 2 cores & 'a large quantity' of other flakes & chips found during excavations in 1881; 7 flakes found during excavations in 1990s	Munro 1882b, 35; Crone 2000
Lochindorb Castle	Highland	15463	Flints	Leaf-shaped arrowhead & other worked flints reported 'from the island and along the shore' in 1942	Canmore Site 15466, notes
Dumbuck	W Dunbartonshire	43402	Flints	2 flint scrapers, 1 flint flake & 1 pitchstone flake found during excavations in 1898	Bruce 1900, 441
Arisaig, Loch Nan Eala	Highland	22521	Flints	Flint flake & angular pieces of quartz found during excavations in 1860s	Mapleton 1868, 518
Hyndford	S Lanarkshire	47687	Axes	1 complete & 1 broken polished axe found on the island during Smith's excavations in 1898, reported on subsequently by Munro	Munro 1899b
Isle of Lewis, Siadar, Loch An Duin	Western Isles	4279	Axe	Stone axe found on the islet by a local in 1982	Canmore Site 4279, notes
Inchgalbraith Castle	Argyll & Bute	42547	Axe	Flint axe found on the island by an angler in 1927	Lacaille 1929, 336
Loch Urr, Rough Island	Dumfries & Galloway	64781	Flint	1 flint flake & 2 round stone balls (poss. natural) found during excavations in 1902	Corrie 1906, 245
Lochan Dughaill, Clachan	Argyll And Bute	38939	Flint	Flint scraper found during excavations in 1892	Munro 1893, 218
Loch Dornal	South Ayrshire	62458	Flint	Flint scraper found during trial trench excavation in 2004	Shelley & Raven 2004, 120
Dowalton Loch	Dumfries & Galloway	63214	Flint	Single flint flake found during excavations in 1884	Munro 1885, 103–4
Loch Kinellan	Highland	12467	Flint	Single flint flake found on the island during excavations in 1914	Fraser 1917, 89

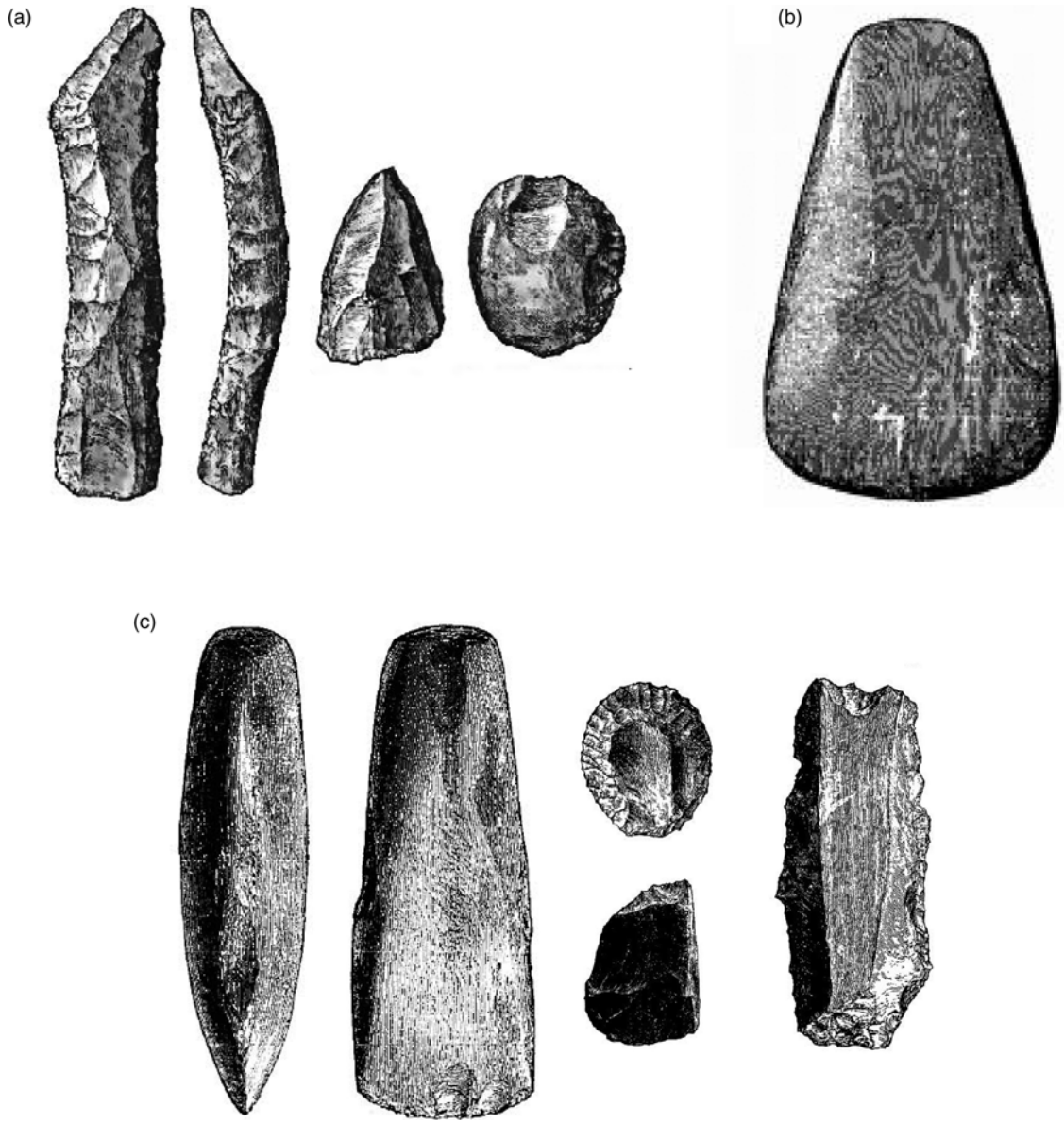

Fig. 10.
A selection of flint/stone Neolithic artefacts found at archaeological islands: (a) Buiston; (b) Hyndford; (c) Lochlee (Munro 1879; 1882b; 1899b)

one Early Bronze Age barbed and tanged arrowhead, were also identified. In total, 35 worked flints (including flakes, blades, and a single retouched tool) were found on the smaller, circular islet. A much larger assemblage of 584 lithics was recovered on the adjacent natural island. The site's excavator suggests that some, or all, of the flints may have been brought in with turves or gravels used in later medieval construction but acknowledges the possibility that there could also be underlying prehistoric elements to the site (David Caldwell, pers. comm.).

At Buiston, Munro noted a flint 'knife', two scrapers, a core, and 'a large quantity of broken flints and chips' (Munro 1882b, 35), while more recent excavations on the site by AOC produced an additional eight flint flakes, as well as two of chert

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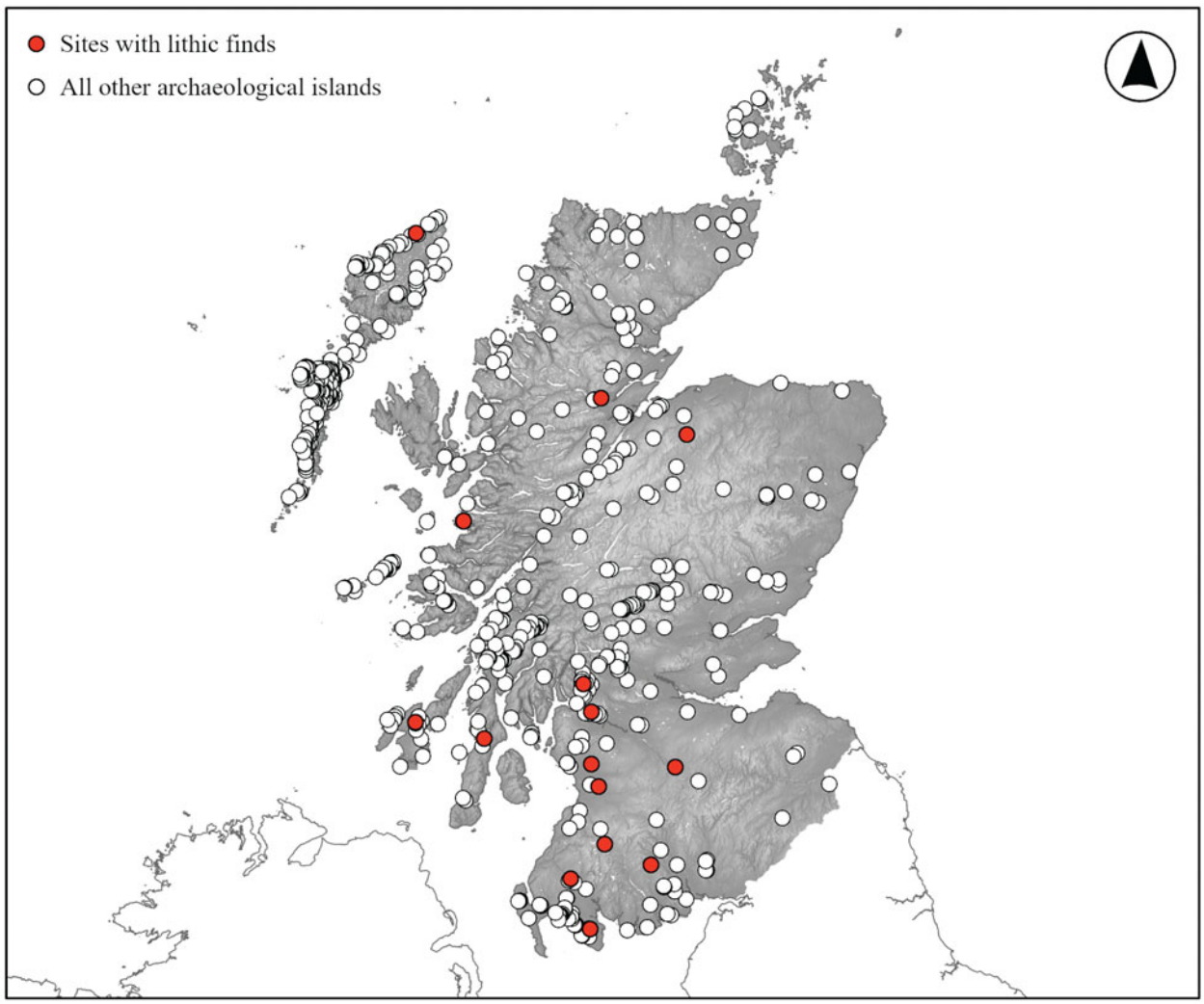

Fig. 11.
Locations of archaeological island sites with Neolithic flint/stone artefacts (NB in the Outer Hebrides, only the single new site is depicted)

and three of quartz (Finlayson 2000, 143; MacSween 2000, 148). MacSween confronted the issue of lithics having been found on this Early Historic site head on, implying through comparison with other sites that they may have been produced during the main phases of occupation, and could thus actually be Early Historic in date rather than residual prehistoric finds.

At Donald's Isle (a tricky site to define that is now a submerged island due to raised loch levels but, in the past, may have been a seasonally flooded natural island/peninsula), Fairbairn (1937, 331) noted that 'of flints and chert, upwards of 120 flakes and chips were picked up from the occupation layer, and also rain-washed out of the loose soil. Several of the flints had been worked, and these may be referable to an earlier occupation, evidence of which was found in the nature of the soil underlying the foundations of the central structure'.

Three different explanations for the presence of substantial assemblages of lithics have thus been put forwards for these three sites: they could contemporaneous with the main, post-prehistoric occupation of the site (Buiston); they could be residual, having been brought in from elsewhere (Finlaggan); or they could be there as a result of earlier, unexcavated prehistoric phases of occupation (Donald's Isle). All three of these explanations could pertain to the smaller lithic

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assemblages found on other sites as well. Stone/flint axes have been recovered on five islets (including Lochlee and Finlaggan, as mentioned above), but sadly the precise stratigraphic contexts for all but the latter remain uncertain. Leaf-shaped arrowheads, also a clearly diagnostic Early Neolithic artefact type, were found at Lochindorb Castle, Highland, as well as on the natural islet at Finlaggan; at the former site it is not completely clear which specific items were found on the islet itself, and which simply nearby (Canmore Site 15466, Notes). Flint scrapers were reported from six sites in total, sometimes appearing alongside other, smaller assemblages of flint, sometimes being the only lithic found. Undiagnostic flakes only are known from three further sites.

It is important to consider in more detail the circumstances under which the flint artefacts described above could have come to be on all these sites. Given the appealing visual character of Neolithic axes, and the fact that these tools are known to have been picked up and valued in periods since then, it is certainly possible that some or all of these could be placed into the 'genuinely Neolithic, but subsequently imported to the site' category. MacSween's suggestion that some lithics may actually have been manufactured during later, Early Historic, phases is an interesting one that is certainly worth bearing in mind. Small lithic assemblages have been found in stratified contexts securely dated to the Iron Age at Black Loch (Engl forthcoming), Cults Loch 3 (Engl 2018), and Dorman's Island (Cavers *et al.* 2011), indicating expedient use of flint during that period as well. However, this scenario cannot be used to explain away the presence of diagnostic Neolithic types such as leaf-shaped arrowheads or scrapers, which are not known to have been made after the Bronze Age. Given all the complexities and caveats outlined above, it is certainly worth considering seriously the possibility – as Fairbairn did at Donald's Isle – that the lithics found on some sites may indeed relate to early, Neolithic or Bronze Age (and in one case possibly even Mesolithic) phases of activity, as we now see regularly across the Outer Hebrides.

DISCUSSION

Right from the opening paragraph of this article, we have seen how antiquarians and early archaeologists were keen to dismiss pre-Iron Age finds on crannog sites. This is despite the fact that, clearly, they were encountered in multiple excavations. This attitude, shaped by the likes of Munro in the late 19th century, has arguably persisted through to the present day, with an Iron Age or later date generally assumed for all crannogs.

The Islands of Stone project, as set out within this paper, has taken a three-pronged approach to the investigation of potential Neolithic archaeological islands. First, building on the work of previous researchers, we have invested a substantial amount of effort into establishing an accurate, up to date and holistic database of all archaeological island sites across Scotland. This provided a very solid foundation upon which to build our subsequent target list of potential Neolithic sites in the Outer Hebrides, and our detailed mining of the literature relating to sites elsewhere which had also produced (previously overlooked or ignored) Neolithic material.

The Outer Hebrides have seen an especially intensive phase of research into archaeological island sites over the past 25 years, including numerous dive surveys. Targeted underwater investigation looking specifically for Neolithic material culture on the loch bed around islets has been very effective at demonstrating the widespread presence of activity of that date there. Our recent underwater survey work identified three new Neolithic sites. Prior to the 1980s, no Neolithic artificially constructed islets had been found; prior to the 2010s, only one had been identified; now, we know of ten.

Given these recent findings in the Outer Hebrides, we have sought to assess the possibility that some archaeological islands elsewhere in Scotland could also have had Neolithic origins. Towards the latter part of the paper, we have reported on our assessment of accounts (within early and subsequent literature) of probably Neolithic flints and stone axes having been found. These were recorded on 15 sites and it is highly likely that more were recovered elsewhere but went unmentioned. As discussed, it is possible that some of the Neolithic finds encountered may have been imported onto the sites in subsequent periods; 'curios' such as polished axes are well-known on later (non-crannog) sites elsewhere. Other, less distinctive lithic material is, of course, also found on some predominantly later sites as well. Usually, this can be explained as being a result of ephemeral features or surface spread occupation having occurred there in earlier periods. In the case of artificial archaeological islands,

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however, this explanation cannot be employed since, unlike terrestrial sites, these islets – if constructed in the Iron Age for example – would not have been in existence. The lithics would have to have been imported subsequently and for undistinctive waste flakes and tools this is hard to explain. It is possible that some flintworking did occur during the Iron Age (and later periods). However, this cannot explain the presence of distinctively Neolithic/Bronze Age artefact types such as leaf-shaped arrowheads and scrapers. As discussed in relation to Donald's Isle, where the large assemblage of lithics had clearly come out of the earliest observed stratigraphic layer (Fairbairn 1937, 331), it seems possible that in at least some cases we could be dealing with genuine earlier Neolithic or Bronze Age occupation/use.

Very important to note in this regard is the fact that, on most of these early sites and many subsequent projects, terrestrial excavation was carried out from the top down. In most cases, the lowest stratigraphic layers were not reached and remain unexcavated, either because digging simply ended due to time constraints or because waterlogged deposits were encountered making 'terrestrial' excavation difficult or impossible. Given this, it is perhaps not surprising that any potential, lowest Neolithic layers have not been encountered. It is certainly possible that at least some of the various 'stray' lithic finds which have been identified represent a glimpse of these unexcavated layers. The absence of Neolithic radiocarbon dates from mainland sites is potentially also a result of the lack of excavation down to the lowest/earliest layers; large-scale targeted programmes have mostly focused specifically on known Iron Age material.

Given our focus on lithics, it is important also to note the apparent absence of any identified Neolithic pottery from these mainland sites and to consider possible explanations for this. The majority of the archaeological islands identified as Neolithic in the Outer Hebrides have produced substantial ceramic assemblages deposited into the loch. Given the prevalence of pottery at these sites, it is notable that no comparable material has been identified on mainland sites along with the flints we have been discussing. One likely reason for this discrepancy is that, in contrast to the Outer Hebrides – where in the past 15 years dive surveys specifically to look for pottery around a given site have essentially been the primary investigative methodology employed – no one has actually yet looked in this way, for this reason, in other regions. Equally, while the antiquarian excavators we are largely relying on would have viewed a polished axe as clearly diagnostic and worthy of mention, they would not have had a comparable ceramic typological framework to work with (cf, Callendar 1929). Where mentioned, pottery is, for example, often simply described as 'coarse' (or similar), preventing any real understanding of its character from our modern perspective. Some of these sherds could have been Neolithic but not recognised or described as such. The recovery of Neolithic pottery from an archaeological island on the mainland would certainly lend considerable weight to the suggestion that these sites have early origins there as well, but, for now at least, no such discovery has been made.

The notion that some islet sites beyond the Outer Hebrides might also have Neolithic origins is not yet proven by any means. Nonetheless, recent definite finds in this region, and older intriguing finds elsewhere, suggest to us that, as we move forwards with research, it is important to keep an open mind as to that possibility. If Neolithic archaeological islands were identified more widely across Scotland, that would be a very important finding. This possibility should no longer be ignored or flatly denied but, rather, explored to the full.

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RÉSUMÉ

Les crannogs néolithiques des Hébrides extérieures (et au-delà ?): synthèse, prospections et datations, par Stephanie Blankshein, Angela Gannon, Duncan Garrow et Fraser Sturt

Dans cette article nous présentons une enquête en trois volets sur toutes les « iles archéologiques » (crannogs inclus) d'Ecosse, avec une attention particulière aux Hébrides extérieures. Le premier volet est une synthèse et un examen critique de la documentation concernant 582 sites d'« ile archéologique ». Cette recherche permet de caractériser la nature des travaux (datations inclues) effectués sur chacun de ces sites, et d'en faire ainsi la toute première base de données globale, précise et en libre accès. Le deuxième volet consiste en des prospections subaquatiques menées sur trente iles archéologiques dans les Hébrides extérieures. Ces prospections nous ont permis d'obtenir de nouvelles informations et de nouvelles datations de ces sites, et notamment de mettre en évidence l'occupation néolithique de trois d'entre eux, ce qui porte le nombre total d'ilots néolithiques dans la région à onze. Le troisième volet consiste en un réexamen approfondi de nombreuses publications sur les fouilles et découvertes anciennes. Cette recherche a permis d'identifier du possible mobilier néolithique sur quinze autres iles archéologiques dans le reste de l'Ecosse. Nous concluons avec une discussion sur les implications possiblement très importantes de ces premières données, et envisageons la possibilité que des crannogs ont pu être construits au Néolithique en dehors des Hébrides extérieures.

ZUSAMMENFASSUNG

Neolithische Crannogs der Äußeren Hebriden (und darüber hinaus?): Synthese, Survey und Datierung, von Stephanie Blankshein, Angela Gannon, Duncan Garrow und Fraser Sturt

In diesem Beitrag wird eine dreiteilige Untersuchung aller „archäologischen Inseln" (einschließlich Crannogs) in ganz Schottland vorgestellt, mit besonderem Schwerpunkt auf den Äußeren Hebriden. Der erste Teil ist eine Synthese und kritische Überprüfung aller archäologischen Informationen zu 582 „archäologischen Inselstandorten". Diese Forschung ermöglichte es uns, die Art der dort durchgeführten Arbeiten (einschließlich Datierungen) zu charakterisieren und so den ersten frei zugänglichen, umfassenden und exakten Datensatz dieser Plätze zu erstellen. Der zweite Teil umfasst neue Unterwassersurveys, die bei dreißig archäologischen Inseln im Süden der Äußeren Hebriden durchgeführt wurden. Dies ermöglichte es uns, weitere Informationen und Datierungsnachweise für diese Plätze zu erhalten; dies schließt insbesondere neue Hinweise auf neolithische Besiedlung auf drei Inseln ein, wodurch sich die Gesamtzahl der bekannten neolithischen Inseln in der Region auf elf erhöhte. Der dritte Teilbereich umfasste eine gründliche Neubewertung der umfangreichen archäologischen Literatur zu frühen Ausgrabungen und Funden. Durch diese Untersuchungen wurde potenzielle

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neolithische materielle Kultur auf weiteren fünfzehn archäologischen Inseln im übrigen Schottland identifiziert. Abschließend erörtern wir die potenziell sehr bedeutsamen Implikationen dieses frühen Materials und ziehen die Möglichkeit in Betracht, dass Crannogs im Neolithikum auch außerhalb der Äußeren Hebriden errichtet worden sein könnten.

RESUMEN

Los crannogs neolíticos en las Hébridas exteriores (¿y más allá?): síntesis, estudio y datación, por Stephanie Blankshein, Angela Gannon, Duncan Garrow y Fraser Sturt

En este artículo presentamos una investigación a tres vertientes de todas las "islas arqueológicas" (incluyendo los crannogs) a lo largo de Escocia, con especial interés en las Hébridas exteriores. La primera vertiente es una síntesis y revisión crítica de la evidencia arqueológica relacionada con las 582 "islas arqueológicas". Esta investigación nos permitió caracterizar la naturaleza de los trabajos (incluida la evidencia cronológica) llevados a cabo en cada uno, y por tanto establecer la primera base de datos holística, precisa y en formato abierto de estos yacimientos. La segunda vertiente es la nueva investigación subacuática llevada a cabo en treinta islas arqueológicas a lo largo del sur de las Hébridas Exteriores. Esto nos permitió adquirir más información y evidencia para obtener dataciones de estos sitios; especialmente nuevas evidencias de ocupaciones neolíticas en tres sitios, incrementando el total de isletas neolíticas de la región a once. La tercera vertiente implicó una reevaluación exhaustiva de un amplio corpus bibliográfico relacionado con las primeras excavaciones y descubrimientos. Esta investigación identificó potenciales evidencias de cultura material neolíticas en un total de 15 islas arqueológicas a lo largo del resto de Escocia. Concluimos discutiendo las implicaciones potencialmente significativas de estas primeras evidencias materiales, considerando la posibilidad de que los crannogs podrían haber sido construidos durante el Neolítico más allá de las Hébridas exteriores.

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