7.1 Introduction

The commercial developments that form so much of today's archaeological work have in the past been largely absent from the West Highlands. Although a cause for regret amongst writers and others based in these areas (eg Rixson 2002), this imbalance is being redressed, often through Scottish Government-funded major infrastructure schemes (Carter et al 2005; Suddaby 2009), fieldwork associated with renewable energy schemes or through landowner-funded surveys (Birch 2005).

Archaeological fieldwork and research projects on Skye have previously concentrated on the upstanding and highly visible Iron Age monuments, with more ephemeral, often older sites or those preserved as negative features remaining unseen and unrecorded. Even as recently as 1996, Patrick Ashmore could list no radiocarbon dates from Skye prior to 750 _{BC} (Ashmore 1996). With the work at Kiltaraglen, and other completed or ongoing projects on the island, eg High Pasture Cave (Birch 2008), Camas Daraich (Wickham-Jones & Hardy 2004), Kilvaxter and Tungadale souterrains (Miket 2002), and at a newly discovered Bronze Age funerary site at Armadale (*West Highland Free Press* 2009), the situation has changed.

The excavations forming the final phase of archaeological fieldwork at Kiltaraglen described in this document have revealed a remarkable series of sites, with contemporary or near-contemporary Late Bronze Age buildings, post-alignments and an enclosure of unknown function in close proximity to each other. In all cases, these are unparalleled on Skye and in the case of the enclosure, seemingly unparalleled - so far - in the excavation record of Scotland. The location of the fieldwork was clearly an important site at some points in prehistory, situated as it is on visible, relatively well drained and fertile ground, close to a sheltered harbour and on the route of easiest foot passage across the island. On the other hand, the winter's fieldwork starkly demonstrated the exposed nature of the site and the problems of water management.

The discovery at Kiltaraglen of the first post-built roundhouses to be recorded in north-west Scotland may be seen as a striking revelation, but it is merely a result of the relative lack of commercial development on promising sites, especially where the presence of drift geology allows the excavation of negative features.

The function of these buildings remains unresolved. The discovery of few artefacts appears to be typical of these sites and it is easy to assume they are domestic in nature. Recent test-pitting on roundhouse sites in the Broadford area and subsequent radiocarbon dating (Wildgoose & Glover 2010; S Birch pers comm) suggests firstly that apparently similar sites may vary greatly in age and secondly that those with entrances to the west may be nondomestic in function.

Many of the elements at Kiltaraglen may have formed part of a ceremonial Bronze Age landscape. Included in this are the Early Bronze Age features, the post-alignments, post setting and individual posts, along with the enclosure, which was filled in and followed by the roundhouses. Later, less extensive activity centred around the enclosure and the miniature souterrains. A hiatus during the late first millennium BC and the whole of the first millennium AD was ended in medieval times. Represented by a series of radiocarbon dates, the evidence from this last era is hard to interpret. There seems to be no reason to question some of these dates, whereas others contradict all other strands of evidence. Was there a period of woodland regeneration followed by burning/clearance which could have caused intrusive charcoal to enter a number of features?

The palaeoenvironmental studies included here form a valuable addition to the limited number of analyses from palaeoenvironmental and archaeological sites in the West Highlands. At Loch Maree, Wester Ross (Birks 1972), 50km to the north-east but in a similar environment, pollen studies indicated that pine was common throughout prehistory, as was oak. At Dubh Lon (Erdtman 1924), 2km to the north-west of Portree, oak appears not to have been present but pine is present almost throughout the diagram. Tipping (1994: 27), in describing the woods of the west coast to the south of Loch Maree, suggests that oak was never as common on the islands and that even in areas where oak was locally common, it may be virtually absent on individual sites.

Neither oak nor pine were represented at Kiltaraglen. In the case of pine, its hot-burning characteristics mitigate against survival but no such reason can be advanced in regard to oak. Species represented at Kiltaraglen include birch, hazel, alder and willow, all currently present in the Portree area.

In the discussion below, the various sites are examined in an order derived primarily from their radiocarbon dates and to a lesser extent from their morphology and from the artefactual assemblage.

7.2 Mesolithic/Neolithic

Blade and microblade elements of the lithic assemblage, most notable from Roundhouse 1, are

suggested on technological and typological grounds to belong to the Early and Mid Neolithic, extending back to the Late Mesolithic in one case. A single rim sherd of decorated Late Neolithic Hebridean Ware was recovered from the bunded topsoil close to the enclosure.

7.3 Early Bronze Age

Two pit features and a deposit of human bone were AMS dated to this period and diagnostic lithic and ceramic artefacts were recovered. The latter will be discussed in the context of the enclosure ditch (Section 7.4). The context of Beaker pottery in the Western Isles appears to differ from that in the east of Scotland (Armit 1996; Johnson above), with the material appearing predominantly in settlement and midden contexts as opposed to the burial or ritual deposits more characteristic of the east.

F134 contained Beaker pottery with an incised geometric design but may, in origin at least, be a post-hole, located at the south-eastern extent of an arc of otherwise undated features, one of which was later cut by a medieval pit (F116). Nevertheless, the section through F134 revealed deposits which, in profile, are more reminiscent of a pit containing an organic vessel than of a typical Kiltaraglen post-hole and the interpretation of this feature is uncertain. Comparisons with ceramics in domestic deposits at Northton on South Harris are highlighted but F134 did not appear to be domestic in nature.

Although a lack of sufficient, reliably contexted organic material precluded the dating of either the post-setting or the post-alignments to the south of the enclosure, these may also be tentatively ascribed to the earlier Bronze Age. This rests on the basis of similarities in post-hole morphology between individual features within different feature groups and on recurring characteristics of these feature groups. Specifically, the grading of post-hole depths seen in all three post-alignments, with the deepest post-holes (and presumably, the tallest posts) in the centre of the alignments, may be a trait characteristic of the earlier Bronze Age. No post-alignments have previously been recorded on Skye but alignments of standing stones, for example at Kensaleyre, are recorded.

The unusual tripartite Pit F168 was located between the circular enclosure and the northernmost of the parallel post-alignments. An oval feature closest to the enclosure ditch was hugged to the south by a second kidney-shaped feature, with a third also kidney-shaped feature to the south of the second. There is no evidence that these features were constructed at different times and the charcoal-rich fills ran without interruption through the three pits. There was no burnt bone. Ninetyseven sherds of cord-impressed Beaker pottery were found. Fourteen lithics including finely crafted end-scrapers of mudstone and a hammer-stone were recovered. Phosphate analysis indicated some elevation of levels but nowhere near those characteristic of a grave. A thick vertical 'dyke' of iron-pan ran obliquely through the fills and, as several sherds of pottery were incorporated into it, this must have formed after the fills were deposited. It may be that this was formed by the slow percolation of water through some kind of covering for the pit, either wooden or stone slabs, although no evidence remained for either. Although the inference of some kind of covering may argue for a funerary function, the purpose of the pit remains unknown, and the seemingly structured deposition that is evidenced by the variation of the pottery leaves the cultural processes behind this open to interpretation.

7.4 Later Bronze Age and early Iron Age

The excavation revealed that in this period a settlement of at least two predominantly wooden houses was located at Kiltaraglen. The ditched enclosure may have been excavated earlier but it was being filled in at this time, indeed statistically, carbonised material in both the roundhouses could originate from the same event as that from the enclosure ditch. Later in this period, carbonised material also entered features cut into the now fully infilled enclosure ditch and at least one of the internal features.

7.4.1 The enclosure

Prior to the excavation of the ditch, the monument appeared to conform best to those described as hengiform (English Heritage 1989), a class reserved for henges and henge-type monuments with an internal diameter of 20m or less. The location conforms to that of other henges, for example Balfarg/Balbirnie, Glenrothes, Fife (Mercer 1981; Barclay & Russell-White 1993) and North Mains, near Auchterarder, Perthshire (Barclay 1983), namely on a ridge of elevated ground with water close by. Both hengiform and henge-type monuments are variations on the henge tradition, classes of which are given by Malone (2001: 169) and Harding (2003).

There are no fully published parallels for this enclosure in Scotland but at Pullyhour, south of Halkirk in Caithness, a circular enclosure was partially excavated in 2008 (Bradley 2011). Close to the River Thurso, it had an overall diameter (including the ditch and bank) of 19.4m and the area enclosed by the ditch had a diameter of 8m. The narrow entrance was in the south. Dating of an old land surface under the bank showed it was built after 1620–1450 cal BC. Later, between 1320 and 1120 cal BC, the ditch was remodelled with both cobbles and a post placed within it. Finally, the site was abandoned, with rubble being dumped into the ditch.

In south-west Ireland, at Reanascreena South, Co. Cork (Fahy 1962; O'Brien 2004) a circular enclosure without an apparent entrance, though with an internal stone circle, had a diameter of 10m within a ditch 3.75m wide. An external bank was preserved and charcoal from an old ground surface below it was dated to 1253–943 cal BC. Charcoal from an internal pit was dated to 1001–835 cal BC (ibid, 328).

At Kiltaraglen, doubts over the classification centre around the fact that all classes of henges and similar structures include at least one entrance which, in all cases, consist of a break in the circuit of the ditch. Here, a potential entrance was recorded in the north-east arc of the ditch where three possible post-holes, perhaps a supporting part of a timber walkway, were sealed by its early backfill although they could possibly pre-date the ditch and have been cut by its excavation. The enclosed area also lacked any trace of post-settings or other features recurring on other sites, and pottery in the upper fills of the ditch was Late Bronze Age in form.

Although it seems clear that the main episode of infilling occurred in the Late Bronze Age, it is impossible to say what length of time elapsed between the initial excavation of the ditch and its backfilling as cleaning may have been both regular and recurrent.

The evidence from the excavation indicated that the laminated deposits (Unit 1) could have formed in the base of the ditch after a single rain event. Micromorphological evidence from the overlying ditch fills indicates that the lower fills (Units 2–3) represent infilled material and the sections indicate this came from both sides, which is suggestive of both internal and external storage of material in bank form. Sterile except for occasional flecks of charcoal and at one point only, pottery, it had seemingly been tipped at the lip of the ditch before being allowed to trickle down into the base, the tip-lines forming a U- or V-shaped profile. It had not been flung, as if by shovel, into the base of the ditch.

Charcoal entered the ditch in one or more thin lenses at several points around the circumference and this was dated to 1300-1050 cal BC. The angle of these tip-lines and charcoal lenses was mirrored by the angle of deposition in the Unit 3 soil deposits, which suggests that there was no recutting of the ditch and that the method of infilling remained constant, despite the hiatus suggested by the micromorphology. These soil deposits contained Late Bronze Age pottery and again, entered from both sides of the ditch. Further, similar pottery was recovered from amongst the stones (Unit 4) in the upper levels of the ditch but these also included a deposit of human bone in Slot 3 dating to around 2100–1900 cal BC. It may be that an Early Bronze Age burial was disturbed during backfilling of the ditch, suggesting that it was above the subsoil surface and perhaps below a shallow stone cairn. The Unit 4 stones may therefore include those previously obtained from the excavation of the ditch and also some derived from the disturbance of nearby features.

The duration of time between the excavation and

infilling of the ditch is uncertain. The earliest date from deposits in the ditch is that obtained from the human bone in a redeposited location within Unit 4. Another possible scenario for the origin of the bone which can be considered is that if the ditch was in fact excavated in or before the Early Bronze Age, a stone cairn may have lain within the enclosure with the human cremation, forming a primary or secondary deposit in the feature which was disturbed and at least partially deposited in the ditch during the Late Bronze Age. Alternatively, both excavation and infilling may have happened in relatively quick succession in the Late Bronze Age, with the human bone being disturbed from a nearby earlier feature either accidentally or otherwise at that time. Beakercontaining pits, somewhat earlier than the human cremation, were close by, with one being situated on the external lip of the enclosure. As to who levelled the enclosure and why, the occupants of the roundhouses are the most likely candidates for the former and the latter can only be guessed at.

Two features were recorded on or just outside the lip of the ditch. F208 appears on stratigraphic and radiocarbon grounds to be substantially more recent than the ditch whereas F168, with its Beaker pottery, is substantially more ancient. Although containing neither bone nor enhanced phosphate levels, the latter is an indication of pit digging activities in the Early Bronze Age. A position on the exterior of the ditch may be seen as an indication of the ditch's presence in the Early Bronze Age and, were this to be the case, either no external bank was present or Pit F168 was cut through it. More likely the pit predates the ditch, but the one certain relationship is that both infilled ditch and pit were cut by a short ditch (F170). It may be that ditches F170 and F233 defined the edge of the infilled ditch and by extension, the room available for the excavation of the sausage-shaped pits.

An approximate *terminus ante quem* for the filling of the ditch was obtained from the redeposited fill of a feature (F245) which cut the upper levels and showed the ditch to be fully filled by the Bronze/ Iron Age transition (750–400 BC). The interpretation of these 23 mostly sausage-shaped features remains an enigma. An initial suggestion that they were graves was based on the association between henges and funerary monuments, but this cannot be supported as they contained no evidence for the former presence of a body in the form of grave goods for example, and phosphate levels, though enhanced, were not elevated to the levels seen in graves. They are not post-holes and the lack of packing stones militates against their being slots for stone orthostats, although wooden plank orthostats (as opposed to posts) remain a possibility based on the raised phosphate levels. Overall, they contained no fills to assist with confidence in functional interpretation. All intersected the underlying ditch fills to some extent, with most being entirely within the ditch's arc, suggesting the feature remained either visible, or was defined in some way at that time. Similarly, no function could be suggested for the large internal Pit F209/216 although dating of its fills (also 750– 400 _{BC}) indicates a close temporal association with the above features. Clearer in terms of function were features F212–3, which retained in plan an irregular pattern typical of the angular Skye basalt and, when combined with the cobble 'ball-bearings' in the base, suggests these features could once have held standing stones. None of these features has been unambiguously dated.

The key difficulty centres on the date of the enclosure ditch and this is exacerbated by the uncertain relationships with the internal and external features. All interpretations of the F171, F208, F209/216 sequence are problematic and the competing categories of dating evidence cannot be reconciled.

To summarise: a longitudinal line drawn down the centre of F209/216 passes exactly through the centre of F208, suggesting, if not contemporary excavation, at least contemporary visibility/use. Neither option is supported by the C14 dates. Further, as previously described, the enclosure ditch may have bent slightly to avoid Pit F208 which, on face value, it should therefore be contemporary with, or postdate. This is, however, contradicted by both the radiocarbon dates and the stratigraphy. In terms of artefacts, all the features are Later Prehistoric.

The fieldwork at Kiltaraglen allowed an insight into the effort involved in the ditch's excavation. The alignment would appear to have been first chiselled out using stone hammers, antler picks or wooden/stone wedges, prior to the main excavation, which was nevertheless allowed to deviate slightly from the ideal as was dictated by the ground conditions. The several straighter sections could be indicative of separate work periods or teams. The re-excavation was undertaken during a period of wet weather in the middle of winter and was a daunting task. With a diameter from ditch centre to ditch centre of 23m, the approximate circumference of the monument is 72m. With an average width of 3m and depth of 1.5m, around 2.25m³ of material per metre of ditch length required excavation and at an assumed soil weight of 2 tons/m³, a total of 162m³ or at least 324 tons of material was removed. Once the weight of the stone component is included (2.7 tons/m³ for solid rock; Summerfield **1991**: 382), around 350–400 tons were removed and relocated.

7.4.2 The roundhouses

Patrick Ashmore (2001), in reviewing the second millennium BC settlement record of Scotland, stresses the uneven distribution of fieldwork and the lack of a specific overview for the period. The present summary of chronologically similar sites will concentrate on the Later Bronze Age.

Ashmore lists and discusses the recent areas where relevant settlements have been excavated.

These include Lairg, in Sutherland (McCullagh & Tipping 1998), where complex uses and reuses of house sites indicated a longlived settlement, from 1800 BC into the Iron Age. At Carn Dubh, Moulin, Perthshire (Rideout 1995), a similarly complex pattern was revealed with a slightly later inception date of around 1100 BC. Further south, many of the platform or scooped settlements in the Borders were occupied in the Later Bronze Age (eg Jobey 1980a & b). Closer geographically, the hut-circle at Cùl a'Bhaile at Knockrome on Jura was dated to 1260-920 BC (GU-1385; Stevenson 1984). The structure had a diameter of 7.5m in its first phase within a composite wall of stone and turf and an internal post-ring. The section (ibid, illus 4) shows that the post-hole, at 0.3m diameter and less in depth, was relatively insubstantial, with the adjacent wall being founded at a greater depth and when compared to Kiltaraglen, substantial structural differences are evident. One constant was the presence of a finely pebbled entrance passage.

Developer-funded fieldwork since 2001 has considerably expanded the database for settlement of this period. Until recently post-ring and ring-ditch structures were ascribed to the mid-first millennium BC (Harding 2004) but more recent radiocarbon dates from Auchrannie, Angus (Dunwell & Ralston 2008), Oldmeldrum, Aberdeenshire (White & Richardson 2010) and Kintore, Aberdeenshire (Cook & Dunbar 2008) all indicate origins in the second half of the second millennium BC for Scotland, as they do for Wales (Johnson et al 2007).

In Ireland, the diversity of the Late Bronze Age is long recognised and well attested (Waddell 1998), with the structures being described by Barry (2000) and Doody (2000). Mallory & McNeil (1991) summarise the period and illustrate the structure at Donegore Hill, Co. Antrim where an irregular postcircle with a diameter of 8m features an off-centre hearth, projecting entrance and patch of exterior paving. Also in Co. Antrim, a roundhouse at Ballyprior Beg (Suddaby 2003) with a diameter of 9m was constructed from stone and clay. This building, one of several on the site, was dated to 1310–1010 cal BC.

In the Outer Hebrides, three east-facing 'terraced' roundhouses were excavated at Cladh Hallan, in the machair on the western coast of South Uist (Parker-Pearson et al 2002 and n.d.) and dated to around 1000 BC. Interestingly, these roundhouses succeeded smaller U-shaped houses which appear to be the building standard for the majority of the second millennium, up to c 1300 BC. All the roundhouses had central hearths and the largest measured c 8m by 9m internally. None had earthfast internal posts (Parker-Pearson et al 2002: fig. 2).

Returning to the Inner Hebrides, a structure was excavated at Balevullin, Tiree in 1912 and published by MacKie (1963). Assigned to the pre-broch era on the basis of ceramics and on comparisons with the nearby Dun Mor Vaul (MacKie 1974). With a diameter of around 10.5m and post-holes cut into sand, any interpretation of the structure remains uncertain.

Moving north to Skye, at Coile a'Ghasgain, Sleat. a stone-walled roundhouse was excavated and dated to a period after 900 BC (Wildgoose et al 1993; Armit 1996; Miket 1996). Field survey in the Strathaird Estate (around Elgol) between 1997 and 2000 (Wildgoose 2000; Birch 2005) led to the discovery in an upland environment of what are assumed to be Bronze Age roundhouses at Druim an Fhuarain as mainly single units in small enclosures. At Abhainn Cille Mharie settlement was both more organised and located on the glen slopes, moving to the glen floor in the Iron Age. A programme of fieldwalking and test-pitting with subsequent scientific dating from roundhouse sites in the area is ongoing (Wildgoose & Glover 2010; S Birch pers comm). Nearby, at High Pasture Cave, Torrin (Birch 2008), Late Bronze Age deposits were recorded in a cave, sealed by Iron Age deposits, with surface features dating from the Neolithic to the Clearances.

A picture of diversity in the settlement record thus emerges, which complements that in Ireland and which the Kiltaraglen site will only enhance.

In both of these roundhouses, the plan of the excavated remains allows for some conjecture in the interpretation of the above-ground structures. Structural reconstruction has been discussed by Guilbert (1981) and Reynolds (1982). More recently, and in an eastern Scottish context, Cook & Dunbar (2008: fig. 195) visualise the above-ground structure of the 33 roundhouses at Kintore. Most recently, Harding (2009) discusses the various interpretations in a British context. This latter study makes several pertinent points, including that numbers of postholes should be minimised to avoid deterioration and that post-holes could be as much constructional as structural in nature. The former point is surely relevant in a Western Scottish context, where poor drainage and an assumed scarcity of structurally suitable wood must have been factors in building design.

Roundhouse 1

The badly truncated features comprising this seemingly unenclosed roundhouse appear to form a rather irregular structure, with a post-defined sub-circular post-ring 7m wide around an internal triangular post-setting and an off-central feature, the function of which has not been conclusively ascertained. The partial ditch upslope may be intended to divert water away from the building and not be a structural component. There was no trace of a second post-ring or ring-groove between the postring and the ditch upslope, but this may not have survived the ploughing of the site. The area was also stripped by mechanical means. A scatter of external post-holes, pebbled surfaces and pits containing fire-cracked stones and charcoal was recorded in the vicinity, with the location of F42 being comparable to the location of F55 in relation to Roundhouse 2. No closely datable finds were recorded, no layers of occupational deposits or midden material lay within the truncated site and the dating of this structure was reliant on radiocarbon determinations which demonstrated a probable abandonment date in the final centuries of the second millennium BC. This abandonment, in terms of the radiocarbon chronology, coincides with the infilling of the enclosure ditch which together may tend to suggest a period of upheaval or at least change in the area at that time. Whether this upheaval was confined to Kiltaraglen or was more widely replicated could form the focus for future work.

In plan, and with reference to the Kintore classification (Cook & Dunbar 2008: fig. 195) this structure best resembles either Type 1a, Type 5 or Type 6. All would be acceptable in a Late Bronze Age context, with uncertainties stemming from truncation and interpretation. Most closely, the remains are those of a post-ring type (Types 5-6) but were F10/50 to be seen as a truncated internal pit, Type 1a might be applicable. It must be said that all of the Kintore reconstructions assume the internal area extends beyond the arc of the posts/ring-ditch but there is no reason why these posts should not form the perimeter and support a ring-beam which pressed outwards onto a mass wall consisting of turf, stone or clay which occupied the (featureless) area up to the ditch to the north-east. In discussing the postring, it seems pertinent first to evaluate the evidence for this marking the perimeter of the structure as opposed to assuming it was an internal post-ring. Were the latter to be the case, it would better explain the pebbled pit (F10/50) on the post-arc, with F4 and F41 being all that remains of the external wall. An absence of packing stones in the perimeter postholes may be highlighted and the posts were clearly intended to fit snugly in the post-pits and were then packed around with minimal quantities of redeposited natural subsoil. Some had been replaced, although in as wet an environment as Skye this may have a lesser time-depth significance than for example at Kintore, where posts may have lasted many years. The relatively insubstantial nature of these post-holes could suggest that these features were not the main load-bearing components. If the rafters extended beyond the posts and ring-beam, seating into the mass wall, the thrust of the roof would have been removed from the post-holes and carried into the wall itself.

Taking contemporary structures into account, a 7m internal diameter approaches the norm. Postexcavation work indicates that the off-central feature (F40) is likely to be a post-hole, despite several comparable and contemporary structures having a hearth in this position, for example Cladh Hallan, South Uist (Parker-Pearson et al 2002) and Cùl a'Bhaile, Jura (Stevenson 1984). Harding (2009, 56) records that central posts occur only in smaller buildings during the Late Bronze Age.

The possibility that this structure was not domestic in nature may be supported by the alignment of the entrance, which points south-west, often the direction of the prevailing wind. Most roundhouse entrances are aligned in the 90° arc between east and south, either to avoid the prevailing wind or to allow a cosmological-based zoning of the internal activities, as suggested for Cladh Hallan (for a contrary view see Pope 2007). However, a recent analysis of Welsh roundhouses (Johnson et al 2007) shows this east through south orientation to be preferred, but not dominant, in the archaeological record and that the alignment of a surrounding enclosure entrance may also be a factor.

The pebbled and stepped base of the entrance passage is also an unusual feature, though replicated at Cùl a'Bhaile. The attractive blueish pebbles have clearly been imported from a nearby source but this feature may well have been solely functional, consolidating a potentially muddy entrance. Deposits of blue anaerobic clay and stones were noted at depth in more waterlogged areas of the site and similar pebbles can be recovered from exposures in the banks of the River Leasgeary.

Roundhouse 2

The feature groups forming the primary ring-ditch/ post-ring and the secondary ring-ditch structure within it form a geographically unique sequence of structures. This suggested phasing rests on spatial, depositional and stratigraphic evidence:

- first, spatial analysis indicates that the orientation of the primary ring-ditch roundhouse differs (by around 15°) from that of the secondary ringditch and that the latter is eccentrically positioned within the earlier structure;
- second, differences in the depositional characteristics of the features allow their categorisation by phase. Phase 1 (and unphased) features were in all cases filled with red-brown silts with Phase 2 features containing dark brown/grey/black silts;
- third, significant stratigraphic relationships were present and these demonstrate the presence of two structures.

As with Roundhouse 1, these structures form an intriguing addition to the archaeological record of Atlantic Scotland, both in terms of construction and chronology. Both are similar to the ring-ditch houses of eastern Scotland but in this location may qualify as indirect precursors to the Atlantic Roundhouses, an all-encompassing term coined by Ian Armit (1990) to describe the Iron Age structures found in the western and northern Scottish Iron Age. Debate in more recent years (eg Gilmour 2002) has focused on the search in the Hebrides for antecedents to the class of Complex Atlantic Roundhouses that includes brochs and galleried duns.

Overall, the primary post-ring with porch and internal ring-ditch adjacent to the posts most closely corresponds to Cook & Dunbar's Type 1a (2008: fig. 195). The structure also closely matches the internal area of the Kintore Type 1a roundhouses but other elements, entrance orientation for example, differ. At Kintore, the post-ring is seen as an internal feature, with more ephemeral elements, for example a concentric ring-groove or bank, having been lost to truncation and this may also be the case at Kiltaraglen. A similar, contemporary building may be present (House 2) at Oldmeldrum, Aberdeenshire (White & Richardson 2010). Further north, in another recently excavated roundhouse at Navidale, Caithness (Dunbar 2007) the oval post-ring was clearly an internal feature, and this is assumed in the reconstructions of most double-ring roundhouses (Guilbert 1981; Reynolds 1982; Harding 2009). The Navidale report (Dunbar 2007: 161) also offers a comparison in terms of axial symmetry and paired post-holes with House 5 at Carn Dubh. In both examples, the nine posts are spaced at, or just over 2m intervals, spanning an internal area of at least 9m diameter. At Kiltaraglen, the posts are 1–3m apart and the internal diameter is also 9m suggesting either a less substantial load-bearing outer wall/bank or a more complex/weighty superstructure. Alternatively, if every second post at Kiltaraglen is counted, spacing of around 3m is apparent and a two-phase post-circle may be suggested.

The structural geometry of the later prehistoric timber roundhouse is discussed and illustrated by Harding (2009). Although only one Scottish example (from Bannockburn, Rideout 1996) is cited and the work concentrates on English sites, the doubleringed plan is seen as standard for these structures, with the distance from the centre to the inner and outer post-rings having the ratio of 3:4. House 2 at Broxmouth (Hill 1982: fig. 8) follows this trend. At Kiltaraglen, a putative outer post-ring or ring-groove has not survived and inferring its potential position is complicated by the slightly oval plan but it could encompass the pit-group and slot to the east and the slot to the north, joining the entrance at either F67/ F68 or at F63/F64. Employing the 3:4:5 ratio seen in the three rings at Pimperne, Dorset (Harding 2009: 57) places the irregular and otherwise ambiguous feature (F118) to the east on the alignment of the roof rafters (45°) down to ground level and this may therefore merely be where the natural slope was levelled to allow construction. None of the examples cited by Harding have a central post-hole and the near central feature here had no defining characteristics.

Were the post-ring to form the inner face of the perimeter wall, as opposed to being an internal feature, it may be that panels of drystone walling were built between the posts, a building style well attested to during the period in question. No substantial evidence for such a wall was preserved but a 'mass wall' such as this needs no foundations, reliance being placed on its weight and bulk to achieve the inherent strength needed to absorb the outwards thrust of the roof. Mass walls have many advantages and combine low technology and efficient insulation with the ability to absorb daytime solar heat, transfer it through the wall and release it within the house at night. Such a wall was recorded in a Late Bronze Age context at Ballyprior Beg, Co. Antrim (Suddaby 2003).

The radiocarbon dating suggests that these structures are slightly later than Roundhouse 1. Chi-squared tests comparing the dates from Roundhouse 1 against the most similar of the dates (GU-17466) from Roundhouse 2 are statistically not significantly different but this is the only date from Roundhouse 2 to pass this test. A ring-ditch building, more substantial than Roundhouse 1 but again incorporating a south-west facing entrance passage and porch, was replaced by a different type of ring-ditch structure, with the open portion of the ditch facing more to the west. The earlier structure was not apparently associated with an external ringgroove and, whilst details remain uncertain, the post-ring could form the inner face of the external wall, rather than being an internal post-ring. This should not cause surprise, as the lack of an internal post-ring is a common feature in Atlantic Roundhouse structures in western and northern Scotland. Posts forming this ring were more closely spaced opposite the entrance than adjacent to it and of uneven depths. Assuming even plough truncation, differences in depth may relate to the lengths of the available timber or to periodic rebuilds but it is conceivable that a particularly shallow post (eg F105) between deeper examples may have the attribute of easy removal, perhaps to allow access to the interior during structural repairs etc.

Ring-ditch structures have been reviewed by Harding (2004) with an up-to-date review of the evidence from Angus and adjacent counties by Dunwell & Ralston (2008). Recent site-based reports include Dryburn Bridge, East Lothian (Dunwell 2007), Oldmeldrum (White & Richardson 2010) and Kintore (Cook & Dunbar 2008), both in Aberdeenshire.

The Kiltaraglen structure would sit easily in the archaeological record of eastern Scotland where ringditches are commonplace, with numbers increasing rapidly, often through aerial photography but also through the archaeological monitoring of commercial developments. The structure is distinctly out of place in western Scotland where no comparable site has so far been excavated. Not only are ground conditions less conducive to good aerial photography, there has been less commercial development. Distribution maps illustrating this disparity in developer-funded fieldwork in Scotland are included in Phillips & Bradley (2004).

Lengthy fieldwork at Kintore, on the A96 to the west of Aberdeen has led to the excavation of 29 Later Prehistoric round structures (Cook & Dunbar 2008: 86). These encompass many structural types and the quantity involved has allowed, through extensive radiocarbon dating, the formulation of a chronological and typological sequence for the development of these structures. In general, and this sequence may only be applicable to Kintore, the earliest feature post-rings with or without porches. Later examples feature internal (concentric) ring-ditches with still later roundhouses having external (but still concentric) ring-ditches. The most recent have a ring-ditch without associated post-holes (ibid: fig 195). Although none of these find a direct parallel at Kiltaraglen, the ring-ditch most closely resembles either Type 2b or Type 3 at Kintore, with these being dated to the period after 1300 BC (ibid: table 38). The most comparable plans come from Douglasmuir in Angus (Kendrick 1995: 43) or at Coul Brae, Mosstodloch, Moray (Gray & Suddaby forthcoming), where the ring-ditch surrounds a haphazard arrangement of internal post-holes which, in some examples, occur on the inner lip of the ditch. Douglasmuir was dated to the Late Bronze Age/Iron Age transition, with Coul Brae being Early/Middle Iron Age.

Ring-ditches themselves are often seen as a method of increasing the usable internal height of the structure around its perimeter and/or as marking of the edge of a peripheral activity zone, perhaps for the stalling of livestock. The absence of meaningful data on which to base these propositions for function are lamented by Dunwell & Ralston (2008) and, unfortunately, the Kiltaraglen excavation once again adds little to the debate. The fills of the ring-ditch are post-abandonment in nature, no noteworthy distribution patterns could be recognised from the sparse finds and the phosphate levels, though raised, are not sufficient to suggest animal occupation. The final observation may be supported by the clear (untrampled) boundary between the fills and base of the feature.

Ditch morphology at Kiltaraglen is typical of these structures. The profile has a steep external face and a more gently graded internal slope. No segmented digging was apparent and the feature possessed no stones that could be considered as paving. The steep profile on the outer side is suggestive of deliberate excavation, as opposed to erosion, and there was no subsoil-derived deposit in the base of the feature which may stem from erosion.

The lack of finds is sadly typical for ring-ditch excavations over wide areas of Scotland and indeed the rest of the UK. This may be a result of ploughing removing floor levels or of scrupulous house cleaning, as finds from excavated structures in uncultivated upland zones (eg Culhawk Hill, Angus; Rees 1998) were also scarce. From the ring-ditch itself, two sherds of pottery were augmented by a single lithic, three coarse stone tools, and two lumps of fuel ash slag. Two additional sherds of pottery were recovered from a post-hole associated with the ringditch. Nothing can be inferred from the distribution of these finds.

Fuel ash slag is the residue of high temperature burning, perhaps of timber structures but also of ovens (Salter 2005). Its taphonomy at Kiltaraglen is uncertain but it was contained within deposits not otherwise characterised by high-temperature burning.

7.5. Undated post-alignments and settings

The curving alignment of features to the northwest of the enclosure included one which contained Beaker pottery in association with charcoal dated to the third quarter of the third millennium BC. On the assumption that this pottery and charcoal formed a secondary deposit in what was formerly a post-hole, the date provides a possible terminus ante quem for the alignment. Depositional similarities exist between all the post alignments and the post-setting, with recurring morphological traits strengthening these links. For example, the step in the profile of F117 was mirrored in F165, part of the alignment which ran parallel to the alignment which included F252. None of the features had a cut on one edge which might be consistent with 'ramping' (Mercer 1981, fig. 49), where the post-pit is cut down at one side to enable easier post insertion.

The rectangular area (*c* 16m by *c* 10m) defined by the post-alignments to the south of the enclosure has superficial similarities with rectangular longhouses on Skye and elsewhere. Examples of these occur at Dun Ringhill, Elgol (Miket & Roberts **1990**: 47) where the three examples depicted on the plan are all around 13m in length by 5m in width. Variously aligned, two are subdivided into unequal compartments and there is a narrowing at the short side of the larger compartment. Dodgson (2002: 38–9) recognises the paucity of knowledge and cites Hebridean studies which question the supposedly Norse/medieval origins of the rectangular black house and notes that unless a byre is included, pre-18th-century houses are smaller than more recent examples. He also notes the existence of 'Pitcarmick' houses in Perthshire which attain 25m in length and the frequent use of biodegradable materials in construction. In short, without supporting artefactual or radiocarbon evidence from useful contexts, the possibility that the postalignments represent Norse/medieval settlement is wholly speculative. Overall, the depositional/ morphological similarities with demonstrably prehistoric features and the presence of occasional (exclusively) prehistoric pottery sherds suggests all are prehistoric in date.

7.6 Miniature souterrains

In the absence of a more refined terminology, both F163 and F181 may be classed as miniature or micro-souterrains, following the terminology of Dunwell & Ralston (2008: 123). The Kiltaraglen miniature souterrains are quite unlike any of the other 31 recorded souterrain sites on Skye (Miket 2002). Souterrains of similar size, plan and assumed construction to those at Kiltaraglen were however excavated in Angus by Kirsty Cameron (2002) at Dubton Farm, Brechin, and at Dalladies, just north of Montrose (Watkins 1980a). A radiocarbon date from F175 at Dubton Farm (Cameron 2002: table 10) placed the abandonment of the feature in the 1st or 2nd centuries AD. Here, F181 possesses the classic 'boomerang/banana/hook' plan seen at grander scale for example at Newmill, just north of Perth (Watkins 1980b) although that example was stone-lined and clearly intended for human access. A constructional context at Newmill was dated to around the 1st century BC (ibid: 169). F163 was morphologically less clearly related to miniature souterrains but is comparable in terms of scale, resistance to light penetration, proximity to F181 and artefact dating.

Dunwell & Ralston (2008: 113–26) have recently reviewed the arguments over the dating and function of these enigmatic monuments in the context of Angus. A fondness in distribution terms for areas of agricultural productivity has been remarked on, as has the association, especially in the Northern Isles, with probably domestic structures. Interpretations include refuges, temples and storage facilities. The latter seems attractive but excavated sites with demonstrably in situ deposits are almost non-existent and there is a question mark over their ability to successfully store anything (like grain) that needs to be kept dry. In this regard, the necessity for a waterproof roof must be a prerequisite.

The Kiltaraglen features were close together in the south of the site and are therefore tentatively linked spatially and with more confidence by similarities in depositional content. Cut into firm boulder clay, there were no deposits that may assist in functional interpretation and no indication of what may have formed the roof or of any wall structure. There was in addition no evidence for any associated dwelling structure, although it could lie outwith the development to the south. Access to both could have been gained from either end but F163 had a baulk of natural subsoil inside preventing through passage. Produce may been have hung inside, as a means of damp or pest avoidance. Access through a removable roof could be had, or a hooked pole in conjunction with a smooth planked floor could have served to extract the contents. Alternatively, small children could enter with relative ease.

All of the fills can be regarded as redeposited and post-abandonment in nature and were similar in both features. The finds derived from the upper levels and assist little in dating the features beyond to state that the 142 closely grouped sherds of unabraded Early Iron Age pottery from 9 vessels in F163 are highly unlikely to be either intrusive or residual. Several had finger-impressed decoration below the rim and they were associated with an iron artefact. Roger Miket (2002: fig 31) illustrates similar pottery from Tungadale souterrain, which is radiocarbon-dated to the earlier Iron Age, as indeed are all dated Skye souterrains.

It is the medieval radiocarbon dates from F163 which may therefore be seen as anomalous, and this is not the only feature at Kiltaraglen to be associated with suspicious dates from this period. They may represent the dating of intrusive charcoal, and burrows were recorded in the subsoil around the features.

7.7 Medieval pit

Although Pit F116 cut an earlier post-hole, it was distinctive in terms of its fill and the iron pan around the cut was less apparent than in nearby features. The presence of carbonised cereal grains and the products of metalworking in a redeposited context are an unusual association. The reddened base of the pit may suggest a heat-generating process took place there but this hypothesis has been disproved by magnetic susceptibility analysis of similar features on other sites. The four radiocarbon dates are all slightly more recent than those from F163 and F208/211 and they coincide best with the Aberdeen-issued David II half-groat (1358–67) found unstratified nearby.

In the 1350s and 60s, northern Skye was held by the McLeods from Uilleam (William), Third Earl of Ross. His lands ran from the Black Isle in the east to Applecross in the west but were forfeited to David II in 1370. The political influence exerted over Skye by the east of Scotland-based Crown varied greatly (MacSween 1990).

7.8 Undated features

Large numbers of undated features were present on the site. Many contained depositional similarities with features shown to be probably prehistoric by radiocarbon dating, by artefactual content or by association with other, securely dated elements of the site. Generally though, the numbers involved lend support to Kiltaraglen's claim to be a significant location in the prehistory of Skye.

7.9 Conclusion

In terms of previous archaeological fieldwork on Skye, the Kiltaraglen excavation investigated an atypical site. Where fieldwork once concentrated on research and on particular locations, defined periods of prehistory, or classes of monument, the Kiltaraglen site was an unknown. Recent monitoring of another residential housing development on improved grassland at Armadale has located Bronze Age funerary remains and commercial development is now a major stimulus towards understanding the archaeological past on Skye.

Kiltaraglen was revealed to contain negative features predominantly dating, where this was established, to the Later Bronze Age. Previously almost unrecorded on Skye, this portion of prehistory is, with the work at Kiltaraglen and to a lesser extent the High Pasture Cave Project, becoming better understood. The results of these excavations have implications for the wider region. The cultural reasons behind the construction, use and abandonment of the enclosure, and any association with the appearance, use, or abandonment of the roundhouses remains open to speculation. Recent fieldwork by Martin Wildgoose in south Skye suggests that roundhouses with entrances facing south-west may not be domestic in nature.

A number of the individual feature groups remain undated, a consequence of the poor charcoal preservation abetted by the paucity of artefacts, in situ deposits and, in some cases, contradictions between the dates suggested by the artefacts, stratigraphy, spatial distribution and the radiocarbon results.

Further archaeological work on apparently unpromising green field sites may therefore be expected to reveal additional remains, the nature of which will determine whether the Kiltaraglen features are typical of an until-now unseen component of Skye's past.