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ARO37: Wilkhouse: An Archaeological *Inn*vestigation

by Donald Adamson and Warren Bailie

with contributions by Kevin Grant, Nick Lindsay and by Donal Bateson, Natasha Ferguson, Dennis Gallacher, Robin Murdoch, Susan Ramsay, Catherine Smith and Bob Will

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293050/908250
+

A9

Site location

Moray Firth

Brora

Inverness

Aberdeen

Glasgow

Edinburgh

Wilkhouse

Gilchrist

N

293050/908050
+

Moray Firth

0   250 m

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Figure 1: Site location maps showing i) Brora in relation to Scotland, ii) Wilkhouse in relation to Brora, iii) The plan of buildings on the site from the plane table survey

Introduction

An archaeological excavation was undertaken under the direction of Warren Bailie, GUARD Archaeology Limited at Wilkhouse between 22 May and 2 June 2017 (Figure 1). He was assisted in directing the excavation by Dr Kevin Grant and Dr Nick Lindsay, Chairman of Clyne Heritage Society. The work was conducted on behalf of Dr Donald Adamson who had completed a study on droving routes in the Scottish Highlands (Adamson 2014). The excavation involved collaboration between Clyne Heritage Society, the University of Glasgow and GUARD Archaeology, and provided training for early career archaeologists and also volunteer opportunities for members of the local and wider community.

Initially, in October 2016, Wilkhouse was recorded using a plane table survey by members of Clyne Heritage Society, assisted by Warren Bailie and Donald Adamson, with digitistion by Kevin Grant. Nick Lindsay had drawn Donald Adamson's attention to Wilkhouse in 2009 as potentially being related to a droving route.

Site location and description

Wilkhouse is located at NGR: NC 93049 08126 and lies between the A9 road and the coast, approximately 5 km north of the centre of Brora, Sutherland. The site lies on a raised beach and is only 50 m above the current day high water mark. Between the site and the old cliff line is the main Inverness to Caithness railway, and the Thomas Telford-designed road, now the A9 trunk road, lies further up the sloping hillside, above the old cliff line.

In total, the site has the remains of four separate buildings, plus the enclosure of what is believed to have been a cattle stance. Facing the beach is the inn building itself. To the north of the inn, and appended to the wall of the enclosure lies a possible out-building. A further small building is positioned adjacent to and immediately west (inland) of the Inn. A fourth building lies 50 m south and west of these. To the north of this building is a small pool and associated bank.

The settlement is situated in the parish of Loth and on the Kintradwell Estate.

Plate 1: Gilchrist Building in centre foreground, the remains of Wilkhouse Inn to the top left. (Photo: Nick Lindsay 27/12/05 taken from the raised beach)

Archaeological and historical background

Wilkhouse is part of the Kintradwell Estate. Kintradwell is well represented in the National Record of the Historic Environment of Scotland (Canmore) with a substantial Iron Age broch, numerous Pictish symbol stones, cists, a medieval chapel and a largely rebuilt laird's house, which was burned down by the Earl of Cromarty in the Jacobite rising of 1745-1746. Wilkhouse appears on the Roy Military Survey of Scotland 1747-1755. This somewhat imprecise drawing shows Wilkhouse and a neighbouring building within what might be the rectangular cattle stance (Figure 2), and with the roadway passing to the west of the building, and immediately below the old cliff line, on the line of the modern day railway. Two other buildings are depicted, one to the north-west of Wilkhouse on the edge of the cattle stance, the other perpendicular to Wilkhouse on the shore side and most easterly corner of the cattle stance.

The next cartographic representation of Wilkhouse is from 1772 when John Kirk surveyed parts of the parishes of Golspie and Loth on behalf of the Sutherland Estate. Wilkhouse is represented as one of the more substantial buildings of the parish not merely as a black rectangle but by a pictogram drawing of the building (Figure 3). It has a chimney stack at either end of the building with a door facing the sea and with windows on either side and a door/window in the north gable. The building appears proportional and has a ridged roof line. There is a more humble building to its northern side, represented more normally as a black rectangle, and it sits in a rectangular space, and a large pond is depicted to its west. The roadway is at this time is shown along the line of the beach and to the east of the buildings.

Plate 2: Part of extant outer enclosure wall around Wilkhouse

Kintradwell, including Wilkhouse, had long been part of the Sutherland Estate, but in 1743 William seventeenth Earl of Sutherland granted a wadset over the Kintradwell Estate to Hugh Gordon of Carrol, Sheriff of Sutherland. A wadset is a Scots legal term for a loan backed by the assignation of land. In other words, Hugh Gordon advanced monies to the Earl of Sutherland in return for a lease on the Kintradwell Estate. The original wadset was extended in 1761 until 1818. It is

Figure 2: Wilkhouse as shown on the Roy Military Survey 1747 – 1755, © British Library Board

noted that this 75-year term was a breach of the 1705 entail which limited wadsets on the Sutherland lands to 19 years and was deemed to be "a mark of exceptional favour" towards Hugh Gordon. Hugh Gordon was succeeded by his son John Gordon of Carrol who in turn died in 1807. He was then succeeded by his son, Joseph Gordon of Carrol who was an advocate in Edinburgh (Adam 1972, Vol. 1, xxiv – xxv). Professor R.J. Adam then further relates that the enmity between Joseph Gordon and the Sutherland estate arose from disputes over the price for the sale of the main Carrol estate by Joseph Gordon to the Countess of Sutherland in 1812. In terms of Kintradwell, Adam states that Joseph Gordon in 1809 first attempted to get the wadset further extended, and then in 1810 tried to get the Sutherland Estate to buy out the wadset immediately. The Factor, William Young, however considered the price to be excessive. Joseph Gordon then countered by leasing Kintradwell to another tacksman, Macpherson, at a return well above what the Sutherland agents were prepared to pay (Adam 1972, Vol. 1, xxv).

The wadset expired in 1818 and the loan was repaid to Joseph Gordon by the Sutherland Estate. In 1819, Kintradwell, including Wilkhouse, was cleared and the people were dispersed in all directions, with some to Brora, but many

elsewhere. A few remained at Kintradwell (email of 1 December 2016 from Dr Malcolm Bangor-Jones to Donald Adamson).

In 1820, James Loch published 'Improvements on the Sutherland Estate'. This lists the 'services' to be performed by the tenants of Kintradwell, including Wilkhouse, now an inn, as an illustration of the abuses of sub-tenancy by a tacksman. It reflects the Sutherland agents' frustration at being unable to influence an Improving Policy on Kintradwell prior to the end of the wadset.

At the same time, the road system, which was vital to the success of any inn, was rapidly changing. In 1812, the Dornoch Firth was bridged at Bonar Bridge, whilst by 1818, the crossing of the River Fleet, south of Golspie, via a 1,000-yard earthen mound with flood-gates was complete (Haldane 1973, 131). The Commissioners of Highland Roads and Bridges were, at the same time, extending a new road all the way from Inverness to Thurso under the direction of Thomas Telford, and by 1819 it was in operation (Haldane 1973, 188). This enabled a mail coach to leave Inverness at 6 a.m. and arrive at Thurso at noon on the following day. In order to achieve this, Telford re-aligned the road at Kintradwell. It now ran (as it still does) about 400 m above the raised beach, on which Wilkhouse is situated. The roadway

Figure 3: Wilkhouse as represented by the John Kirk survey 1772 © Reproduced with the permission of the National Library of Scotland.

shown in the Kirk map of 1772 was abandoned. Telford himself touched upon this in 1828 when he noted that "in surveying for the future Roads, it was with difficulty and not without danger that I could scramble along a rugged, broken, sandy shore…" (Haldane 1973, 189). Not only this, but the Sutherland Estate established inns on the new road at Golspie, Brora and Helmsdale (Haldane 1973, 189-190). Wilkhouse had not only been by-passed; it had been made redundant.

The Papers of the Sutherland Estate held in the National Library of Scotland, at Deposition 313, contain extracts from the Kintradwell papers which were used by James Loch in the 1820 volume 'Improvements on the Sutherland Estate'. Some of these touch on life at Wilkhouse as revealed by original research carried out by Nick Lindsay and add further flavour. In 1796-1797, Alexander Gair, a wright, did joinery work for John Gordon of Carrol at Kintradwell. As part of the bill, the roof of the Inn at Wilkhouse was repaired for £3 2s (Dep 313 – 3517). The estate accounts for 1800 list 144 tenants for the Gordon of Carrol holdings, but only one, a Robert Gordon, is given as living at Wilkhouse (Dep 313 – 3500). Further estate accounts for 1799 and 1803 in respect of grain being issued for planting reveal Robert Gordon in residence along with a hand-out of oatmeal for "Alexander Bruce's wife" (Dep 313 – 3499). In 1800, Donald Gunn, soldier of the Loyal Sutherland Highlanders, owed several people money. Among these were Robert Gordon (£1 7s for linen) and Robert Gordon's wife, who was owed 2s 6d (Dep 313 – 3500). There is a rent roll for 1811, and this shows two families living at Wilkhouse. As expected, one is Robert Gordon (rental of 10s in cash, one hen and shearing 24 'stooks') and the other is William Gilchrist whose rental is £9 9s, but who also must shear 24 'stooks' and render two days service in repairing 'the peat road' (Dep 313 – 1015).

Nick Lindsay has also noted the following births in the Old Parish Registers of Loth for Wilkhouse:

> *29 June 1803 – Mary Gordon, daughter to Robert Gordon and Cursty Fraser.*

> *28 July 1803 Flora Bain, daughter of Alexander Bain and Janet McKenzie*

The graveyard at Clynekirkton reveals a sadness relating to Wilkhouse:

William Fraser and Mary McKinzie buried their 11-year-old son, Kenneth on 22 October 1784.

It seems possible that the Fraser, McKenzie and Gordon families are all related by marriage and were resident at different times in and around Wilkhouse Inn.

Perhaps most revealing of all is a description of a visit to Wilkhouse in 1802 by the Rev Donald Sage in his memoirs "Memorabilia Domestica" (Sage 1899, 145). Donald Sage gives an account of his first journey to school in Dornoch from the Strath of Kildonan, where his father was the Minister.

> *"My father mounted his good black horse Toby, a purchase he had lately made from Captain Sackville Sutherland of Uppat, while my brother and I were lifted to the backs of two garrons employed as work-horses on the farm. We set forward, and both my sisters accompanied us to the ford on the burn, close by the churchyard, whence, after a few tears shed at the prospect of our first separation, we proceeded on our journey accompanied by a man on foot. We crossed the Crask, and stopped for refreshment at an inn below Kintradwell, in the parish of Loth, called Wilk-house, which stood close by the shore. This Highland hostelry, with its host Robert Gordon and his bustling, talkative wife, were closely associated with my early years, comprehending those of my attendance at school and college. The parlour, the general rendezvous for all comers of every sort and size, had two windows, one in front and another in the gable, and the floor of the room had, according to the prevailing code of cleanliness, about half an inch of sand upon it in lieu of carpeting. As we alighted before the door we were received by Robert " Wilkhouse," or " Rob tighe na faochaig," as he was usually called, with many bows indicative of welcome, whilst his bustling helpmeet repeated the same protestations of welcome on our crossing the threshold. We dined heartily on cold meat, eggs, new cheese, and milk. " Tam," our attendant, was not forgotten; his pedestrian exercise had given him a keen*

appetite, and it was abundantly satisfied. In the evening we came to the manse of Clyne.

Thus, we meet Robert Gordon or "Rob tighe na faochaig" as he would have been known in the district. This translates as "Rob of the House of the Whelks". Alongside him is Kirsty Fraser, who may have been the daughter of a previous innkeeper, William Fraser, who was married to Mary McKenzie.

There are still whelks in the bay next to Wilkhouse. The title Wilkhouse is a translation from the Gaelic word 'faochaig' or whelk, and 'tigh' or house but it is not possible to be certain why this title was given to this particular dwelling. It should be noted that the dog whelk is associated with the production of blue and purple dyes in antiquity (Ziderman 1986, 46-52). A whelk dye workshop has been found in Ireland dating to the seventh century but as yet no equivalent has been found in Britain (Henry 1952, 163-178). It can only be a matter of speculation, but it is possible that the name indicates something more purposeful than merely an association with a source of food.

There is one further development which impinges on the archaeology of Wilkhouse. That is the coming of the railway which adopted almost the same line as the trackway shown by William Roy in his map of 1747 - 1755. In other words, it followed a straight line immediately below the old cliff line at the back of the raised beach, and 70 m west of Wilkhouse itself. The Sutherland Railway opened in 1868 as far as Golspie. It was then extended as the Duke of Sutherland's Railway to West Helmsdale and opened on 1 November 1870 (Awdry 1990). Considerable numbers of metal objects relating to the Victorian railway were found by the metal detectorists associated with the excavation, but none were significant enough for recording. They were mainly adjacent to the line of the railway itself, and were largely nuts, bolts and small pieces of rail. Wilkhouse is shown as an unroofed building in the first edition of the OS 6-inch map (1879). It then disappears from subsequent mapping. There is some archaeological evidence to suggest that the ruined building was utilised by those working on the railway around 1870.

Thereafter Wilkhouse slowly sank into obscurity, and the ruin continues to decay. The ground

around the building is used for the grazing of animals as the sandy soil makes it less suitable for the growing of cereal crops (Plate 3).

Plate 3: Wilkhouse from south-west gable

The excavation

The excavation was designed to target Wilkhouse and the various buildings associated with it within the wider cattle stance area. The trenches (Figure 4) were located across areas of each building with the intention of investigating specific features of the above ground built remains noted during initial research by Donald Adamson, with further targets highlighted for investigation during the plane table survey in 2016. During the investigations, and where it was merited, trenches were expanded to provide an opportunity to better understand the various structures.

The Inn

A series of nine trenches were excavated across the main Wilkhouse building and its outbuilding (Figure 4). The main building was orientated NE/SW and the outbuilding was orientated NW/SE. The trenches targeted key features in the structures to establish relationships and to recover any evidence for the function of each building. Wilkhouse measured approximately 11 m long by 6 m wide and the adjacent outbuilding measured approximately 7 m long by 4 m wide.

In Trench 1, the entrance to the building, central to the sea-facing wall (102) consisted of a stone threshold with remains of some stone paving outside the building (Plate 4). A central doorway is depicted on the 1772 Estate map. The paving was laid directly on the natural sand subsoil with some accumulation of organic deposits probably from trampling. Overlying the paving was a layer of rubble collapse. Artefacts recovered from the

paved area and overlying layers include pottery sherds, glass shards, roof slate fragments, bone buttons, a bone comb fragment and two copper alloy dress pins. During the removal of the collapsed material from the entrance the remains of a high quantity of mortar fragments was apparent within it. The mortar was also found adhering to the inner face of the wall as a render to the left on entry.

Trench 2 was excavated over the north-east gable end (105) of Wilkhouse to reveal any evidence

for the hearth associated with the chimney shown on the building on the 1772 estate map. The hearth area was quite complex with an initial substantial stone paved surface (121) laid on top of the natural sand. The first of two hearths (142) (Plate 5) was tied into the remains of the gable wall with two orthostats with a stone base raising it up from the paved surface it was built upon. A second hearth (105) (right of Plate 5) was framed by one of the orthostats of the first hearth with another further east, also tied into

Figure 4: Trench locations across Wilkhouse, the Northeast Building and Gilchrist.

Plate 4: Trench 1 after rubble removal.

Plate 5: Trench 2 fireplaces (142 and 105).

the gable wall, forming the other edge of the secondary hearth. This secondary hearth was also built on top of the paved surface (121) but is stratigraphically later than the first hearth (142), possibly being a modification or enhancement of the original. Incised decoration was evident on the easternmost upright orthostat framing the secondary hearth (105) that took the form of an inverted cross. Also evident on all of the orthostat edges was a bevelling suggestive of knife sharpening by the fire. There were also occasional holes observed in the orthostats, although it is not clear whether these were deliberate or as a result of natural erosion prior to their use at Wilkhouse.

Investigations outside Wilkhouse in this same trench revealed a wide stone foundation that was laid on top of an earlier construction, which extended below the north-east gable of the building (Plate 6) while also extending in every direction beyond the edges of Trench 2. Small fragments of bone and a shard of iridescent bottle glass were recovered from context 009 below the earlier construction, suggesting a date not long preceding the construction of Wilkhouse.

Plate 6: Trench 2 external.

Trench 3 was excavated over the south-west gable end of Wilkhouse to reveal any evidence for the hearth associated with the chimney shown on the 1772 estate map. The hearth at this end differed from the utilitarian nature of that at the north-east end. Here the walls were rendered in mortar either side of a neat rectangular fireplace with fragmented stones forming the base of the hearth (Plate 7) that was built into the centre of the wall. Material recovered during the excavation of this fireplace included pane and bottle glass and pottery sherds.
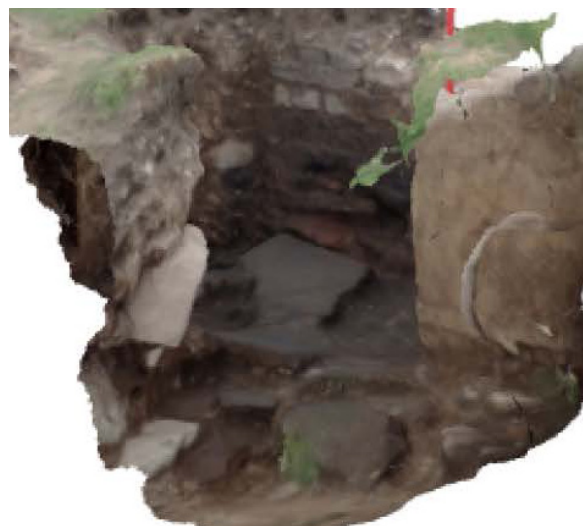

Plate 7: Trench 3 showing fireplace.

Trench 10 was opened in the measured centre of the Wilkhouse building with the intention of establishing the presence or absence of any evidence of a central hearth. The trench was dug down to the natural sand floor level but reveal no central hearth. This trench was then overcut to approximately 1 m below current ground level to ensure that no earlier phase of building was missed.

Trenches 14, 15 and 18 were opened to investigate the extent of the mortar render on the inside of the Wilkhouse building. The mortar in Trench 18 (Plate 8), stopped around 5 m in from the south-west gable of the building, confirming that the south-west half of the internal space was rendered, including either side of the entrance on the seaward wall (102). There was no evidence of any such render around the more robust and utilitarian north-east fireplace or the adjacent walls.

Plate 8: Trench 18 showing edge of mortar render on north-west wall (123).

Outbuilding adjacent to the inn

Trench 3 extended to cover the south-east end of the outbuilding and the passage between it and Wilkhouse. It revealed a passage between the two buildings and that the inner floor of the outbuilding was constructed of small flat paving stones laid on to the natural sand surface (Plate 9). There was a concentration of sooty material on, and between, the stones suggesting that there may have been some form of fireplace at this end of the building, most likely a hanging lum given the lack of any other structural evidence at floor level. Two other trenches (12 and 13) were located to establish the presence of other features such as an entrance. Both revealed further evidence of the paved flooring 153 (Figure 5), but the location of any entrance to the outbuilding was not found during the investigations.

Trench 12

Figure 5: Trench 12 showing north-west wall (140) of Wilkhouse outbuilding and flooring (153).

Outbuilding on wall of stance

Plate 10: Trench 17 section.

Two trenches (16 and 17) were excavated across the footprint of a possible outbuilding to the north-east of Wilkhouse, suggested by the sub-rectangular form of the above ground remains. Trench 16 was laid across the perceived short axis of the building revealing a stone paved floor with an inset drain, which one would expect within a byre. The byre drain led towards a doorway, also revealed in Trench 16, central to the south-east, seaward- facing long wall of this building. Trench 17 was placed towards the north-east end of the building with the hope of uncovering a gable wall. No wall was uncovered, but the trench cut through a floor level and revealed a number of earlier layers pre-dating this building (Plate 10, Figure 6). The lowest archaeological

Plate 9: Wilkhouse outbuilding showing flat angular stones against south-east gable (124).

layer 171 was a very dark organic-rich deposit underlying a greasy fine clay layer (170). This layer and the overlying clay were found below 1 m of wind-blown sand and were thought to long pre-date the outbuilding, the Wilkhouse building, the associated outbuilding and yard enclosures, which are located at a much higher ground level in this landscape. The organic-rich layer (171) was radiocarbon dated to the middle Neolithic period (3334-3312 cal BC at 2 sigma - SUERC-77416). This occupation layer had traces of Scots pine and heather charcoal together with some burnt peat and some fragments of bone, interpreted as possible hearth waste or scattered midden material. This is evidence of the location being utilised around five millennia prior to the construction of Wilkhouse, but the nature and extent of any occupation is uncertain given the small scale of the investigations in this particular locale and below the building on the wall of the cattle stance.
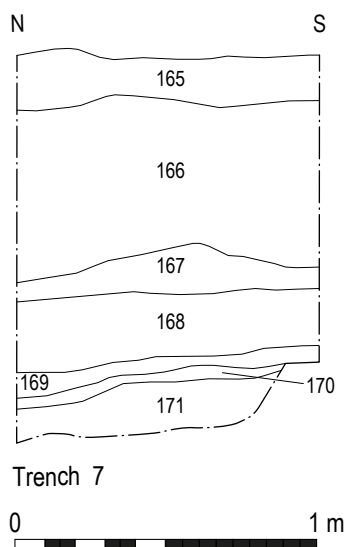

Figure 6: Trench 17 section showing layers encountered.

The 'Gilchrist' building

The Gilchrist building lay approximately 50 m to the south-west of Wilkhouse and consisted of a long building with at least two partitions and a room added on to the south-east wall towards the south-west. The main building measured approximately 18 m long by 5 m wide; the room forming an L-shape at the south-west end measured 10 m by 5 m (Figure 7). The south-east side of Gilchrist had a small enclosed area measuring approximately 100 m² with an entrance located off-centre towards the north-east end of the building on the south-east wall.

A larger enclosed area measuring approximately 280 m² was apparent around the north-west side of the building. The room divisions of Gilchrist appear to have been added later with the original building being one long room.

Trench 4 was opened over the perceived entrance to Gilchrist (Figure 8). The entrance, now off-centre to the full length of the Gilchrist building, may have been central prior to an addition to the south-west. Further excavation here could confirm if this is the case. The threshold was constructed of slabs of stone although now in a fragmentary state (Plate 11). Inside the entrance there were the remains of further stone paving.
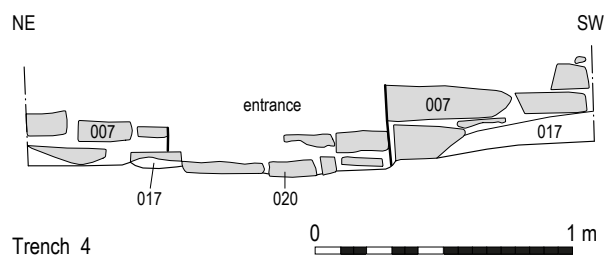
Figure 8: Elevation of entrance into Gilchrist building.

Plate 11: Trench 4 showing entrance to Gilchrist.

Trench 5 was opened over the junction between the main building and the off-shoot to the south-east. This trench confirmed that the wall (004) abuts the main long wall of Gilchrist (002) showing that this room was added later (Figure 8, Plate 12).

Trench 6 and 14 merged to become one trench and they were placed across the perceived entrance to the north-west enclosure. The trench also overlapped with the north-west wall of Gilchrist and showed that there was a curved wall (042) in the direction of the enclosure entrance (Figure 9). This may have served as a wind-break, when extant, for the entrance. What remains is a single course of drystone construction, the

Trench 8

Trench 9

entrance to the
north-west enclosure

Trench 6

entrance

Trench 4

Trench 19

Trench 5

Trench 7

Modern Animal Track

Gilchrist

N

0   10 m

Figure 7: Plan of Gilchrist showing detail for trenches 4, 5 and 6.

enclosure wall (013) also consisted of one course of drystone. The entrance area of the enclosure had an accumulation of dark organic-rich material (016) over the natural sand (017).

Plate 12: Trench 5 showing wall 044 (right) abutting the main wall 002.

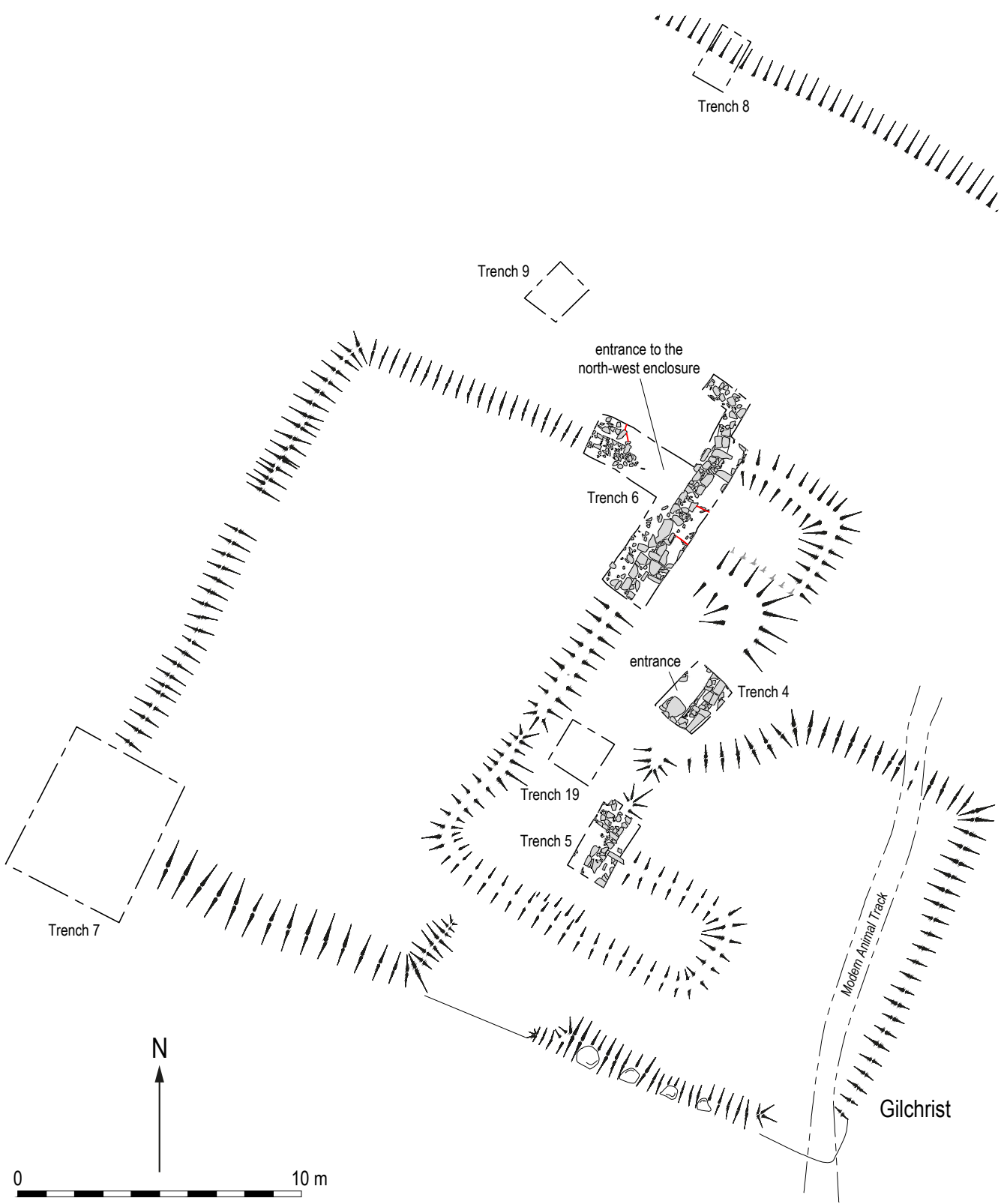Trench 7 was placed over the south-west corner of the north-west enclosure at Gilchrist. This revealed little, if any, in situ construction with only loose stones in the topsoil layer (Plate 13). The ground rose slightly where the enclosure turned in this area, suggesting the potential for a small wall. This has possibly been robbed out or it was so insubstantial that it has eroded out over time.

Trench 8 was placed over the edge of the pool area to the north-east of Gilchrist and west of Wilkhouse. The results here were similar to those of Trench 7, where some loose stones were noted within the topsoil layer but no in situ built remains were apparent. The pool is defined by the presence of a low, straight bank, there is therefore no question that this defined the pool edge in this location.

Plate 13: Trench 7 showing loose stone remains of the enclosure wall.

Trench 9 was excavated over a slight rounded mound near the Gilchrist building. No in situ archaeology was found in this location although loose stones and organic-rich lenses were found below the topsoil level, possibly related to the enclosure at Gilchrist where similar dark deposits were encountered.

Trench 19 was placed centrally within the building in search of a central hearth. Evidence for burning was found although it was not possible to establish the form or full extent of the hearth. This was the only possible hearth uncovered during the limited excavations undertaken at Gilchrist.

Metal detecting survey

A metal detecting survey was conducted across the investigation area and the wider locale within 50 m of the Wilkhouse and Gilchrist buildings (Figure 10). A total of 15 coins and one token was recovered, ranging in date from the seventeenth to the nineteenth century (see Bateson, below).

NE
SW

044

002
002

Trench 5

0   1 m
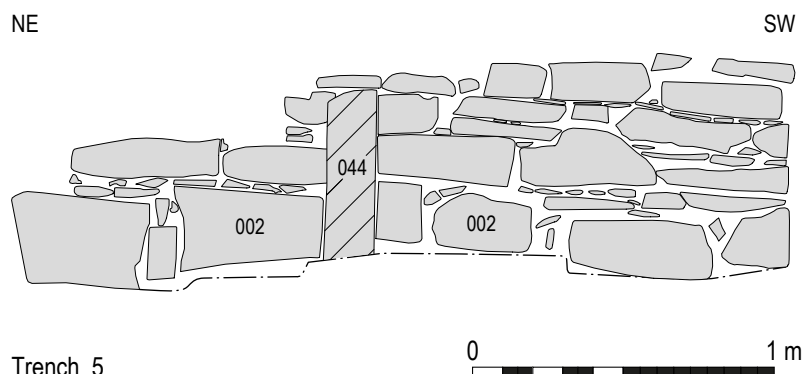
Figure 9: Trench 5 Elevation showing long wall 002 and wall 044 of offshoot room 18.

Three were found in the north-west enclosure of Gilchrist, four were found in the enclosure to the north-west of Wilkhouse and the rest were found in a general SW/NE distribution. This could be indicative of a thoroughfare across the larger enclosed area or more generally a reflection of the direction of travel along the drovers' road. A total of nine buttons were also found to lie in a general SW/NE distribution leading from the north-west side of Wilkhouse enclosure adding weight to this hypothesis. A single button was recovered to the south-east of Wilkhouse and four were recovered from the north-west enclosure of Gilchrist.

A cluster of iron, and more specifically cauldron fragments, was recovered along the south-east exterior area of Wilkhouse, on or close to the former roadway, and probably representing more than one iron cauldron. It is uncertain why the cauldron fragments were clustered here but it does suggest that if they were associated with Wilkhouse, which seems likely given their location. Such items may relate to the closure of the inn after the roadway had been relocated by Thomas Telford just prior to 1819. Two other cauldron fragments were recovered from the Gilchrist building, one from each of the enclosures observed there. A riveted copper alloy plate recovered during the investigations on the Gilchrist building is tentatively interpreted as the type of repair one would expect for a copper still.
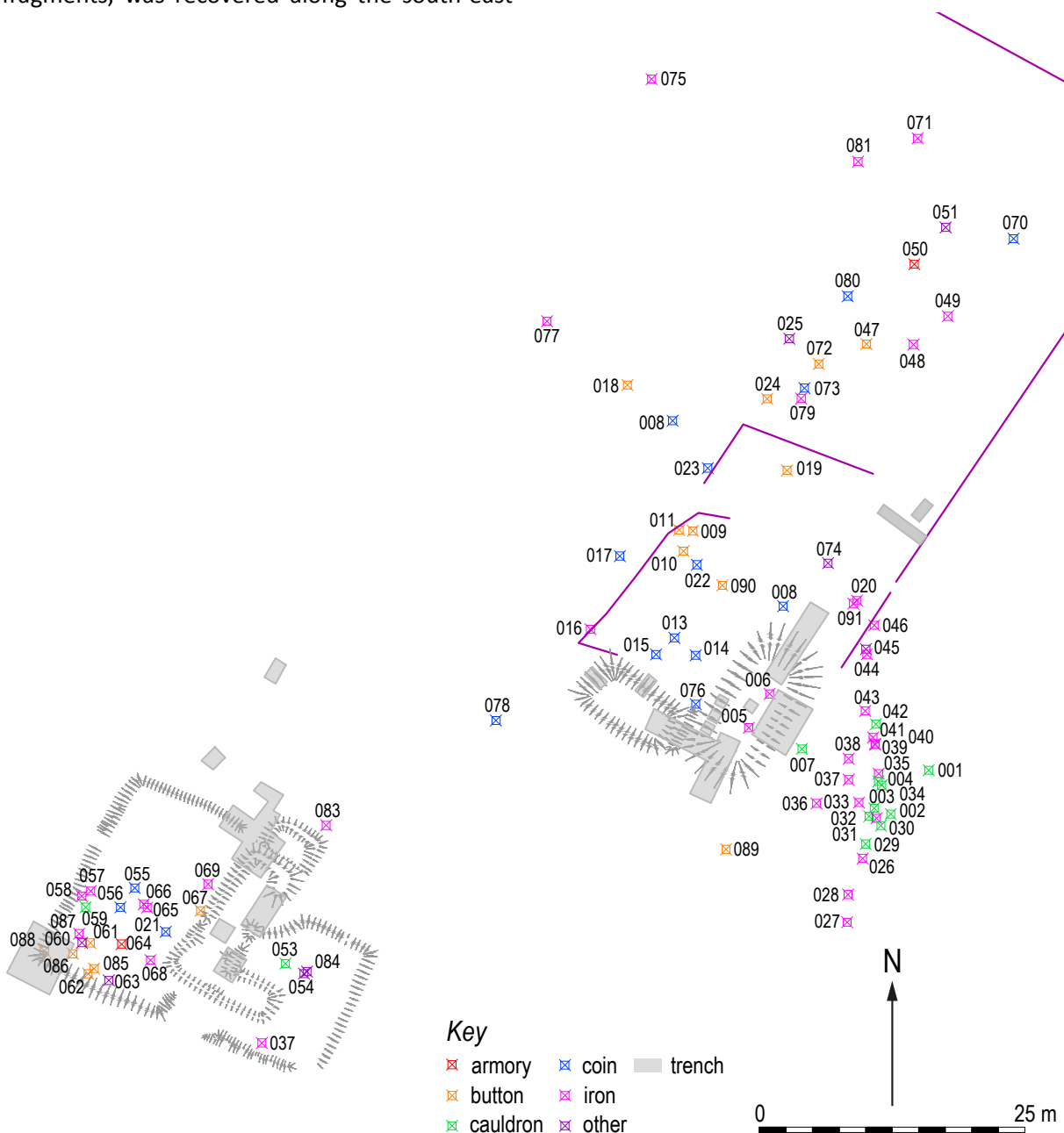

Figure 10: Metal detecting survey, distribution of artefacts by type

Specialists' reports

Archaeobotany

By Susan Ramsay

Methodology

Sample processing

A programme of soil sampling was undertaken to examine the carbonised archaeobotanical remains from excavations at Wilkhouse. In total, three bulk samples and six spot finds were analysed for the presence of botanical remains. The bulk samples were processed by flotation for the recovery of carbonised remains, using standard methods and sieves of mesh diameter 1 mm and 500 μm for flots (and wet sieved samples) and 2 mm for retents from flotation. There was no indication that any of the samples had the potential for the preservation of uncarbonised plant remains through waterlogging.

Macrofossil analysis

Dried flots and retents were examined using a binocular microscope at variable magnifications of x4 - x45. For each sample, estimation of the total volume of carbonised material <4 mm and >4 mm was made. For each sample, all charcoal fragments >4 mm were identified, together with any carbonised seeds or other plant macrofossils present within the samples.

The test characteristics of small seeds and the internal anatomical features of all charcoal fragments were further identified at x200 magnification using the reflected light of a metallurgical microscope. Reference was made to Schweingruber (1990) and Cappers et al. (2006) to aid identifications. Vascular plant nomenclature follows Stace (1997).

Wilkhouse building

Nine trenches were excavated across the main Wilkhouse (WB) building and the Wilkhouse outbuilding (NEB).

Trench 1 covered the entrance to the building, which was in the middle of the wall (102) facing the sea. Collapse (104) from this wall produced only a small amount of Scots pine charcoal, but not enough to suggest that this was the remains of structural material. Occupation material (119) that lay over the paving (155) outside the entrance contained alder, ash and burnt peat/soil suggesting the remains of hearth waste.

Trench 2 lay over the north-east gable end (105) of Wilkhouse and was excavated to investigate the hearth area. Context (109) was a build-up of organic rich material against wall (105). It produced charcoal of heather type, Scots pine type and burnt peat/soil. In addition, there were single grains of barley and oats present. A layer of organic build-up below (111) that pre-dated the Wilkhouse structure showed a similar charcoal assemblage of heather type, Scots pine and possible peat but no cereals were present in this instance. The similarity in the fuel types may just reflect the most available fuels in the locality.

Trench 3 was excavated over the south-west gable end of Wilkhouse, to investigate a second hearth located at this end of the building. A dark deposit (143) that had accumulated against walls (123 and 124) produced only the remains of burnt peat/soil, as did collapsed material (128) inside wall (124).

Outbuilding on wall of stance

Trench 17 was located across the north-east end of a possible outbuilding to the north-east of Wilkhouse. No wall was found but several floor layers were excavated. The lowest layer (171) was very organic in nature but only produced traces of Scots pine and heather charcoal together with some burnt peat and some fragments of bone. This could be hearth waste or scattered midden material since the bone did not look to have been burned. A radiocarbon date was obtained for this lowest level (171) of 3334 to 3027 cal BC with a 95% probability. This dated layer lay below drier compacted clay (170), which in turn lay below softer clay (169), which was then overlain by (168) wind-blown sand. This was then below the upper organic, charcoal rich layer (167). So, the lowest charcoal rich layer (171) dates to the Neolithic period. It consists of charcoal material formed from Scots pine. This is then covered by deposits of clay arising from a pool or similar, which in turn was replaced by blown sand, and then built upon in the post medieval period. An investigation of the nature and extent of the Neolithic layer would require further work by way of an open area excavation. However, the dynamic nature

of the coastline and the relict dune system is suggested, together with the longevity of human agency upon the site.

Gilchrist building

The Gilchrist Building lay a short distance to the south-west of Wilkhouse. The building had a small enclosure to the south-east and a larger enclosure to the north-west.

Trench 6 was located across the entrance to the north-west enclosure. Context (030) was thought to be tumble or collapse from the north-facing wall of the main Gilchrist building. However, it produced only carbonised remains of peat/soil.

A probable occupation layer (046) was excavated in Trench 10. However, only a single large fragment of birch charcoal was recovered from this context and so little can be said about its possible origins.

Bones and shell

By Catherine Smith

Animal bones and mollusc shells were mainly collected by hand excavation. In addition, sieving of soil samples recovered a few bone fragments. The bones were identified as far as possible to species and bone element.

Although the number of fragments recovered from the site was fairly small there was evidence that sheep/goat, cattle, pigs and domestic fowl (*Gallus gallus*) had all been present and presumably eaten. Wild mammals were represented by a deposit of juvenile rabbit bones in context 128. Wild birds may also have been exploited: several bones of the auk family, mainly from a single razorbill (*Alca torda*) and single bones from fulmar (*Fulmarus glacialis*), wader species and small duck species. Fish bones, not identified to species, were also numerous. The numbers of animal bone fragments from each species from Wilkhouse and Gilchrist are summarised in Appendix 1, where 'small ungulate' is most likely sheep/goat, and 'large ungulate' is most likely cattle. The 'indeterminate mammal' fragments were all fairly small and many of them are probably recently broken-off flakes from the identified portion of the assemblage.

Mollusc shells are also listed by site and context in the archive spreadsheet (Wilkhouse. xls). Minimum numbers of individuals were estimated from either the hinge (bivalve) or apex (gastropods).

As well as the most commonly collected whelk species, *Littorina littorea*, a few flat whelks(*L. obtusata*) and dog whelks(*Nucella lapillis*) were also recorded. Other species were limpets (*Patella* sp.), mussels (*Mytilus edule*), cockle (*Cerastoderma* sp.) and otter shell (*Lutraria lutraria*), all of which are edible. One crab claw was also noted. The number of mollusc shells from the two sites is shown in Appendix 2.

The animal bones are presumed to represent animals which were eaten and there is evidence of knife cuts and chopped bones, which indicates that this was so. However, the bones were not abundant and not all parts of the carcass were represented and perhaps this implies the diet at the drovers' inn was not based on conspicuous consumption. Mutton was certainly in the diet, interestingly obtained both from large sheep, probably from 'improved' breeds, as well as the smaller native breeds found at medieval and earlier Scottish sites. In one context, bones from both large and small types were found, perhaps representing both the older traditional type of animal as well as an incoming improved breed.

Beef was also eaten but was not too plentiful. The bones of cattle found at the site were from the shoulder and the lower limb, neither of which is a prestige joint of meat. However, they would have made a good stew or soup.

The most interesting deposit is however the assemblage of rabbit bones, all of them unfused and therefore from young animals. It is of course tempting to speculate that these were the leftovers from a rabbit pie – this is not the first time that unusual ingredients have been recovered from excavations at Brora. The Saltpans faunal assemblage was notable for the presence of a collection of bones from young rooks, from which pies were traditionally made in earlier centuries (Smith 2012).

Although no bones from dogs were found, a cattle metacarpal from Wilkhouse showed carnivore gnaw marks, presumed to have been made by a dog.

Bones from a razorbill did not display butchery marks, and so it was not possible to say whether

this individual had been eaten or was simply a natural windblown casualty. Birds of the auk family, as well as many other seabirds, were exploited as food from the earliest times until at least the nineteenth century and it is therefore possible that this bird had been eaten. Domestic fowl occurred in three contexts at Wilkhouse and so were not particularly abundant. However, the presence of the bones implies that both meat and hens' eggs would have been available.

It would have proved a disappointment if whelks, (or wulks) had not been present at 'Tigh na Faochaig', and indeed some were found. However, there were more whelks at Gilchrist than there were at Wilkhouse. The largest deposit of whelks was found in Gilchrist context (046), SF 100, where 130 complete shells with a volume of approximately 600 ml were recorded. This is equivalent to slightly more than a pint in Imperial measure, enough to make a good light meal, especially if accompanied by bread and butter. Although not as numerous as whelks, limpets were also present and may also have been eaten by people or alternatively used as fishing bait. Two limpet shells had mortar adhering to them implying the empty shells had been used as keying or pointing to hold mortar in place between the stones of a building.

The overall impression from the faunal remains recovered from Wilkhouse is that the meals provided for the inn's users were probably based around the cheaper cuts of mutton and beef. Rabbit, fowls, both wild and domestic, fish and the shellfish after which the inn was named were also served and while the guests ate their fill, the drovers' dogs gnawed the leftover bones.

Pottery

By Bob Will

Introduction

342 sherds (1320.9 g) of pottery were recovered from the investigations and the largest group consists of modern white earthenwares. Many of the sherds were very small and abraded with cracked or crazed glaze and several sherds had split. These signs indicate that the sherds may have been moved around since they were initially deposited. All the sherds retrieved from the excavation were individually examined and weighed with diagnostic features such as rims,

handles and bases, and differences in fabric and decoration recorded. The pottery was catalogued according to guidelines and standards produced by the Medieval Pottery Research Group (MPRG 1998 and 2001).

The breakdown of sherd numbers and fabrics present are summarised in Appendix 3.

White earthenwares

The largest group are white earthenwares and represent cups, saucers, plates, and planters and general tablewares. The technique of producing a pure white glaze was developed in the 1790s where it quickly dominated the market and was adopted by most pottery factories. The sherds are decorated in a variety of techniques including hand-painting, transfer-printing and sponge-printing. The earliest use of transfer printing was c. 1795 and it soon became the dominant form of decoration with blue being the most common colour. Several sherds were decorated by sponge painting.

Pearlware

One small base sherd (SF 16) from a cup or small bowl with blue sponged decoration on the interior was recovered in a 'pearlware' type glaze. These vessels are identified by a blue tinge to the clear glaze where the glaze is slightly thicker, often seen on the underside of the base as in this example. This was a step on the way to developing white earthenware in the late eighteenth century and continued to be made for a considerable time after whitewares began to dominate the market so their presence cannot be used to date an assemblage and they can be quite difficult to identify.

Red earthenwares

Red earthenwares were also represented and fall into two categories slip-lined bowls, and brown or black glazed vessels. The slip-lined bowls are large bowls with wide rims and a narrow base that are glazed on the inside with usually a white slip with a clear glaze on top although patches of light yellow or green sometimes occur. The exterior of the vessels are rarely glazed. These vessels seem to have been used in the dairy to separate the cream from the milk and were made at several small potteries around Scotland in the nineteenth century.

Brown and black glazed red earthenwares were also recovered and represent storage jars and bowls. Several sherds possibly, from the same bowl, had a brown and cream decoration on the inside.

One small sherd (SF17) was recovered with slip-trailed decoration. This is where a different coloured solution of liquid clay 'slip' is used to decorate the vessel. either with simple designs or sometimes writing and mottos. Unfortunately, the shard was too small to get an idea of the pattern or lettering. This method of decoration was used from the post-medieval to modern times and this sherd may date to the late eighteenth or nineteenth century. Again, this was quite common and used by a number of potteries and factories.

One of the brown glazed red earthenware shards (SF 40) is from a small cylinder or spout with glaze in the inside, which shows signs of heat as the glaze has bubbled. This sherd may be from some type of industrial vessel but unfortunately the piece is too small to identify.

Industrial stoneware

Perhaps surprisingly, only two sherds of Industrial stoneware were recovered. These types of vessels were made in vast quantities in several factories including Glasgow and Portobello in Edinburgh in the late nineteenth and early twentieth century and were used for a variety of products from whisky to ink. The main vessel forms are bottles, storage jars and flagons and often have the name of local shops and businesses on them.

Clay pipes

By Dennis Gallacher

Two fragments of the stems of clay pipes were found in the Wilkhouse building itself. Both were identified as being from the period post - 1800.

Glass

By Robin Murdoch

Introduction

The glass assemblage from Wilkhouse/Gilchrist, Brora, can be discussed as one group since the finds from both buildings are very similar, backing up the hypothesis that they probably worked in tandem as a drovers' inn (see Appendix 4).

However, there is one rather surprising aspect in that there are very few substantial shards of glass, especially bottles, which implies one of two possibilities. A large amount of broken glass (cullet) may have been gathered for recycling. The use of cullet was common, especially in bottle making where colour was not particularly important. This reduced the energy required and hence costs for the glassmakers. However given the distance from Brora to the nearest glassmakers in Fife, the other option would be a local dump not found during the dig. This practice was particularly common in rural areas before the days of bespoke refuse collection.

In fact Gilchrist yielded a slightly greater number of shards, 158, than Wilkhouse, 131, and was categorised as follows: window glass 91, bottle glass 61 and vessel glass 6. The numbers for Wilkhouse were: window glass 82, bottle glass 31 and vessel glass 18. A further two shards window glass, five shards bottle glass and four shards vessel glass were recovered with metal-detecting finds. All of this added up to a total of 300 glass shards, but unfortunately very few were large enough or detailed enough for accurate identification.

Bottle glass

As has already been mentioned very few substantial shards of bottle glass were recovered making it difficult to assign reasonably accurate dates. The colour of bottle glass from Scottish sites did not vary to any great degree between the early eighteenth and early nineteenth centuries. Those shards which did have diagnostic features appeared to be predominantly later eighteenth century to early nineteenth century.

The condition of the bottle glass is also quite good. If there was anything of greater antiquity, levels of corrosion would be greater given that the buildings were lime mortared (the worst conditions for the preservation of glass).

The type of site must also be taken into consideration. A drover's inn is not likely to be catering for the high end of the market and glass was particularly expensive in the seventeenth century. However, by the end of the first quarter of the eighteenth century bottle glass turned up everywhere. The presence of a few shards of probable late seventeenth century window glass

suggests both Wilkhouse and Gilchrist may have existed then.

The historical evidence indicates that the site was cleared by that popular figure, the Duke of Sutherland, around 1819 or soon after. However, there are a few glass shards from nearer the middle, or perhaps even later, nineteenth century. Three small finds yielded shards of clear moulded bottles and one contained two shards of cobalt blue medicine bottles. Although moulded bottles are known from the late eighteenth century, they do not become common until after 1821 (Henry Ricketts of Bristol patented the first semi-automatic moulding machine in that year) and It is not unreasonable to allow a few years for the technology to spread. The cobalt blue shards are unlikely to be earlier than c. 1850.

It is possible that the buildings continued in some limited use after the 'clearances' since the main purpose of that exercise was for the introduction of sheep and sheep need shepherds and shepherds need accommodation. It is also possible that squatting took place.

Window glass

The presence of window glass does indicate a level of sophistication above the typical rural buildings of the eighteenth century. Fourteen different types of glass, referenced A – N, were identified based on physical appearance, i.e. colour, thickness and level of corrosion. These reference letters are with respect to the Wilkhouse/Gilchrist assemblage and have no relevance outwith that. One sample of each was submitted for pXRF analysis. Seven out of the fourteen different varieties (B, C, D, E, F, G and K) were recovered from Wilkhouse and Gilchrist indicating a major glazing exercise was happening at both sites at around the same time. Glass is quite a tolerant substance to make and its constituent quality did not have to be super accurate. This meant that consecutive batches could vary slightly in composition and several of the apparently different types could have been made over a short period.

The results of the analysis (Appendix 5) confirmed that all samples, except one, contained strontium indicating that kelp was used for all or part of the fluxing alkali during manufacture. Samples A, B, C, D, E, G, H, I, and K were entirely kelp fluxed

and would have been made between c. 1700 and c. 1835. A further 4 samples, F, L, M and N had lower levels of strontium along with high levels of calcium which identify them as a hybrid high lime low alkali glass (HLLA) probably made between c. 1650 and c. 1700. This composition has been noted from quite a number of Scottish sites and seems to be a stage in the move from the traditional HLLA composition towards kelp fluxed glass. Six out of the seven types, which were common to both Wilkhouse and Gilchrist, were entirely kelp fluxed reinforcing the argument for a joint glazing exercise probably in the eighteenth century. The HLLA Sample F found in both confuses the picture slightly but may be an indication that both buildings had some glazing in the late seventeenth century. Only one other HLLA shard (a type L) came from Gilchrist while all the examples of M and N came from Wilkhouse.

Sample J from Gilchrist turned out to be a bit of an oddity a predominantly potash lime glass with almost 7% arsenic in it. At 5 mm thick and clear it probably dates to after the abandonment of the site. Arsenic was added, but not in that sort of quantity, to first generation synthetic soda glass c. 1835-c. 1870 as a purge for gas bubbles.

Vessel glass:

The vessel glass tells a similar story to the rest of the assemblage, predominantly mid-eighteenth century to early nineteenth. Four rim shards and four foot shards were recovered, mostly thin blown and probably from stemmed drinking glasses. The one exception was the foot shard from MD097 which was rather thickly blown and may just have come from a firing glass. These thick blown glasses were used for toasts and when empty were slammed down on the table and sounded like gunshots, hence the name. Another clue to dating was the lack of folded feet. Up until around 1730 the rim of the foot was typically folded over giving a double thickness helping to reduce chipping.

Coins

By Donal Bateson

The numismatic finds consist of 15 coins and one token found in worn condition and mostly of the eighteenth century. Two buttons were also recovered which were originally thought to be coins.

The earliest coin, however, dates to 1588 and is a billon hardhead or twopence Scots of James VI issued in August. The use of billon was discontinued in 1593 and replaced by copper turners in 1597. This example from Wilkhouse shows little wear and was probably lost during the 1590s. Once the copper had been introduced, billon coins would have been recalled to the mint to retrieve their silver content and survival after 1600 would have been unusual.

The copper turners, also tariffed at twopence Scots, were produced throughout the seventeenth century and one example from the issues of the 1640s is included here. The turner takes its name from the French double tournois which James VI copied for his copper coin in 1597. Double tournois circulated in some numbers in Scotland during the seventeenth century and the find here, of a royal issue of Louis XIII, probably of 1628, fits the pattern. Both may have circulated for much of this century.

From the end of the century comes an Irish copper halfpenny of Charles II dated 1681. It may well have come across after the Williamite campaigns but was probably dropped early in the eighteenth century.

The majority of the Wilkhouse coins are very worn copper halfpennies of George II and III. There are ten of these , three are illustrated (Plate 14). Three are of George II, two seemingly with the 'young' head of 1729-39 and one with the 'old' head of 1746-54. The latter has three punch marks on the head and might represent a Jacobite defacement of a Hanoverian object. In addition, there are four examples from George III's first issue of 1770-75. A further three halfpennies do not retain enough detail to enable them to be assigned to either monarch. None of these halfpennies is later than 1775 and the subsequent issues of George III are absent.

However, a trade token of the late eighteenth century was found. This is one of the common issues of the Parys Mine Company on Anglesey in North Wales with the druid's head. It is a penny and appears to bear the date 1788 (Plate 14). The bulk of the issue was in halfpennies, so the find of a penny is unusual as is its recovery in Scotland.

The list of coin finds is completed by a young or 'bun' head bronze halfpenny of Queen Victoria. The bronze coinage was introduced in 1860 and the young head halfpennies were continued through to 1894.

Both buttons appear to be plain on the front. However, the first may be noteworthy if it is associated with the turner of the 1640s as this would date it and the adhering cloth to that decade. The second button with 'FINE PLATED' on the back is probably nineteenth century.

Metal

By Natasha Ferguson

The excavation and systematic metal detecting survey recovered a large assemblage of metal work typically reflecting material culture of the eighteenth to nineteenth century. All diagnostic metalwork is listed and described in Appendix 6. There are also a small number of objects which will be discussed in more detail due to their significance in highlighting particular social groups and individuals using the inn or engaging in activity in the surrounding landscape. This includes two eighteenth century military buttons (MD 059; MD 090), a fragment of a brass measuring instrument (MD 066), and two neatly folded objects (MD 068; MD 079).

There was a relatively large assemblage of metalwork reflecting both occupation debris and accidental loss around the vicinity of the inn and route along the drovers' road. The majority of the assemblage represents a general cross-section of mid-eighteenth - nineteenth century rural and domestic material culture with dress fastenings, such as buttons and buckles, low denomination coins, cast iron wares, and various agricultural fragments. Interestingly, the variety and volume of buttons in this assemblage are unusual out-with a suburban context, including some rather fashionable decorated tombac and gilt examples, and highlights the inn as a bustle of activity with a clear mix of early modern social rank and wealth.

Within the assemblage are two neatly folded metal discs, one which is identifiable as an eighteenth century decorated button, and the other which could be either a button or a worn base-metal coin. Button MD 079 dates to the mid-

late eighteenth century and was recovered from the north-west enclosure of Gilchrist. It is a large button with a trace of fine punch decoration on the facing, possibly representing a heart-shape. While thin, metal buttons are robust objects and can generally survive post depositional activity in the topsoil with limited damage. In this case one side of the button has bent towards the shank on the reverse. The neatness of the bend, without it snapping, suggests deliberate folding rather than post-depositional damage and is likely to have taken some effort.

The second object (MD068) is more difficult to identify as either a coin or button as both sides are corroded leaving no indication of surface markings. However, the weight of 8 g for its size would perhaps suggest a coin (Plate 14). Again, the nature of the folding with two distinct actions of bending in half and then folding over the outer edge is neat and would have taken deliberate effort and therefore is unlikely to represent post-depositional damage. The deliberate folding of coins, in particular medieval silver pennies, is a phenomenon recognised in England and in association with pilgrimage sites and devotions to saints (Kelleher 2012, 193). Post-medieval examples are more regularly found across the UK, including Scotland. A common example is the bending of silver shillings of James II and William III dating to the late seventeenth century onwards. Such examples have been interpreted as 'love tokens', although the source of this reference is unclear (PAS database). From Scotland a late seventeenth century 30 sols silver coin of Louis XVI, which had been folded in half was claimed as Treasure Trove in 2013, may represent a symbol of Jacobite loyalty with Louis XVI being an important figure in the first Jacobite wars (Ferguson 2013). Any references to folded buttons however have not yet been uncovered, but the practice is unlikely to be unknown and may follow the same principles as folding coins. The faint presence of a love heart design on the button may support the theory as a 'love token'

with the folding a deliberate action to transform it from its original purpose to a token of love or remembrance. Two folded objects within close proximity to each other is interesting and could indicate the presence of a devotional site, such as a well or some other feature no longer visible.

Of significance within this group are two military buttons of the Sutherland Fencibles, c.1793-1801. The military presence in Scotland from the mid-eighteenth century onwards is becoming more visible as small finds of regular and non-regular troops, such as buttons and shoulder-belt plates related to Fencibles and Volunteer units, are becoming more common with metal detecting (Ferguson 2016). Fencible regiments were non-regular units raised as a local defence force in the absence of regular troops engaged in fighting abroad. The threat of French invasion from 1793 saw the increased presence of Fencible and Volunteer units in Scotland, with Fort George near Inverness representing a key location for muster and training (Fairrie 1991, 81). The Sutherland Fencibles had a short history as they, with many other non-regular forces, were disbanded after the 1802 Treaty of Amiens. However, the archive relating to the Sutherland Fencibles, with lists of some 600 - 700 men from Sutherland parishes, does survive and can be found in the National Library of Scotland (Morrison 2001, 46). The presence of soldiers was no doubt a common sight in the late eighteenth century and it is likely the drovers' road was regularly patrolled, with the inn acting as a convenient place to muster for training or assignment of duties.

Another interesting object is a fragment of a finely made late eighteenth - nineteenth century bronze measuring instrument such as callipers or dividers. Their presence clearly relates to some form of high-level survey such as Ordnance Survey mapping (Hewitt 2010, Plate F and V), or the construction of the Sutherland railway in 1870.

Plate 14: Top row - SF 68 folded over coin or token, copper alloy pins SF 173, 174 and 194, eighteenth century Georgian coin; middle row - two eighteenth century Georgian coins and SF 81 trade token from Parys Mine Company, Anglesey; bottom row - SF 41 copper alloy oval riveted fitting, SF 196 fragment of bone comb, SF 090 Sutherland Fencibles pewter button, and SF 059 Sutherland Fencibles copper alloy button.

Discussion

As a theme, it might be pertinent to adopt the phrase 'change and continuity' in discussing Wilkhouse.

A visitor, such as Donald Sage, around 1800 would have seen the inn as very distinct and different from the three vernacular buildings surrounding it. The inn itself was built with lime mortar, a slate roof, a chimney at either end, along with fine plasterwork and panelling within. The other three buildings would have had low stone walls, roofs of turf or heather, supported by crucks and still using central fireplaces. The inn can be seen as representative of modernity, and all that that implied when the farming patterns and landscape use were changing across the Scottish Highlands. Only the estate house, itself, was built in this fashion at Kintradwell. Every other structure referred back in time to building methods and knowledge which had gradually accumulated in the locality. In a sense therefore, the inn represented something intrusive, new and foreign in the landscape.

Roy's Map depicts an enclosure with four buildings, with two of these clearly within the enclosure and the others on the periphery. It is not clear if the more northerly peripheral building represents the Gilchrist building, and no representation of it is shown in John Kirk's detailed 1772 estate map of Kintradwell as the Gilchrist building may have post-dated that map. We know from the artefactual evidence that the two principal buildings, Wilkhouse Inn and the Gilchrist building, co-existed for a time in the eighteenth and/or early nineteenth century, and from documentary sources that two families (Gordon and Gilchrist) resided here for a time in the early nineteenth century (Figure 11). The excavation highlighted the very different construction techniques of the two buildings. The Gilchrist building has insubstantial unmortared walls and was probably roofed with turf; in contrast to the mortared walls with lime rendering, and the slate roof of the inn. However, they shared relatively sophisticated window glass. By the time of the first edition Ordnance Survey map (1871/72), Wilkhouse is depicted as an unroofed building with no cattle stance or other buildings (including Gilchrist) shown. Wilkhouse disappeared entirely by the second edition (1904). The exercise of investigating this site, from the initial prospection by Donald Adamson, with advice and local knowledge from Nick Lindsay, has highlighted the value of using documentary sources, coupled with cartographic evidence, and testing this evidence through archaeological investigation. Using the documentary and cartographic evidence alone, one could be forgiven for not recognising the existence of the Gilchrist, and indeed other structures in the environs of Wilkhouse.

The artefacts found on site weave a rich picture of life in the years leading up to 1819. There is then a smaller group of objects which suggest the possibly partial re-occupation of the ruinous inn when the railway was being built around 1870. Thereafter the archaeological record is largely silent.

The relatively low amount of bottle glass is suggestive of careful disposal, and the most likely place for that was into the nearby sea. No midden was identified in relation to either Wilkhouse or Gilchrest buildings, and with the beach only metres away, it is tempting to think that an efficient house-keeper such as Kirsty Fraser, with her floors well sprinkled with fresh sand (per Donald Sage), was using the most obvious disposal method for household waste. Similarly, there was not a great number of pottery sherds, and again this might point in the same direction.

What bottle glass there was relates to the late eighteenth or early nineteenth century. In other words, it suggests the last phase of occupation of the inn. Every bit as interesting is the existence of small amounts of glass which are more diagnostic of the later nineteenth century. There were three small finds which yielded shards of clear moulded bottles and one contained two shards of a cobalt blue medicine bottle. It may be that the partly ruinous inn building was used by railway workers as they constructed the Sutherland Railway around 1870. One can easily imagine a tarpaulin stretched over the building to shelter the navvies and surveyors as they drove the railway northwards. By 1904, no buildings are represented here at all.

The window glass had its chemical composition analysed and most was kelp-fluxed glass which was a process which became redundant around

1835. This is consistent with a glazing exercise not long before the clearance of the site in 1819, which encompassed both the inn and the Gilchrist building with relatively high-status glass. There are however, some limited amounts of window glass which might refer to slightly earlier times and even into the seventeenth century, although further testing would be required to be conclusive. The window glass is of a much finer type than might have been expected in rural Sutherland at the time.

There were shards of drinking glasses found, both rims and feet. These were diagnostic of the late eighteenth into the early nineteenth century. The 'firing', or 'shot' glass found evokes a picture of toasts being exchanged after a meal or drinking session, with the noise of the glasses being slammed down on a table echoing through the inn.

The vast majority of tableware relates to white earthenware. This clear white glaze was developed in the 1790s and represents the last phase of the inn in operation. The pottery finds covered hand-painting, transfer-painting (known from 1795) and sponge-painting techniques. The other substantial portion of the pottery finds relates to red earthenware. These represent storage jars and bowls, including slip-lined vessels used in a dairying capacity. This speaks directly to Donald Sage's account of dining heartily on "cold meat, eggs, new cheese and milk". It can be imagined that the milk and cheese was served from these red earthenware bowls.

The couple of sherds of industrial stoneware jars, which relate to the later nineteenth century, might well have been contemporary with the partial re-occupation of the ruinous inn during the railway construction phase, as they are too late in period to be related directly to the inn in operation. So too, in all probability, is the one later Victorian coin found on the site. This was a young bun-head bronze halfpenny, which can be dated to the period 1860 to 1874.

The majority of coins relate to the last phase of Wilkhouse operating as an inn, but they also indicate a much longer period of occupation. Most, ten in number, are halfpennies of the reigns of George II and George III, although there is also a Parys Mine token, valued at one penny, dated 1788. The distribution of finds indicate that many were dropped in an enclosure at the rear of the inn which might have been the area for unsaddling.

Figure 11: Drovers arriving at Wilkhouse in the eighteenth century (artist's impression).

Four earlier coins suggest that the site was occupied in the seventeenth century and before. The earliest coin is a billon hardhead (two pence Scots) of James VI, which seems to have been dropped in the 1590s and is dated 1588. There are then two 'turners'. The first is a Scottish copper turner of the 1640s, also worth two pence Scots, and the second a French royal issue 'double tournois', dated 1628, of Louis XIII. The probability is that both circulated through much of the seventeenth century. The fourth coin is from the reign of Charles II, dated 1681, and is an Irish copper halfpenny. It may have been dropped early in the eighteenth century.

Donald Sage's meal, as described, might have been representative of standard fare at Wilkhouse. Milk, cheese and eggs supplementing cuts of mutton and beef (although not necessarily the most prestigious cuts). However, the diet appears to have been varied, with rabbits, birds (including auks) and fish on the menu. In addition, marine shellfish and notably whelks were eaten. Cereal grains of barley and oats were also found, and this is not unexpected in an area where such cereal are still grown today.

The fuel in the fires appears to have been a mixture of logs (Scots pine, birch, alder and ash) peat and heather. Interestingly, although coal outcropped near the beach in Brora, and had been used since the sixteenth century to make salt, there is no evidence of coal being used at Wilkhouse.

Personal items such as pins, buckles, strap fittings, thimbles and a part of a comb add colour to the domestic context of the buildings. All are consistent with the last phase of occupation in the eighteenth and early nineteenth centuries. Two military buttons of the Sutherland Fencibles, one possibly belonging to an officer, suggest that the inn was a meeting place for a company of soldiers in the period 1793 to 1801, when Britain was being defended against the possibility of French invasion by militia. In 1800, it is known from documentary evidence that Donald Gunn, soldier of the Loyal Sutherland Highlanders, owed money widely in Kintradwell. An unfired pistol ball may relate to this period, or even hark back to the burning of Kintradwell by the Jacobites in 1746.

The fittings of the inn and associated buildings are also represented with items like a key, a clock-winder, the remains of an iron cooking pot found on the former roadway between the inn and the beach, and some copper fittings including a section of rivetted copper plate and associated leatherwork. Further work is required to establish whether the copper item might have been part of a whisky still. The iron pot had been apparently smashed on the trackway, and because of the danger of laming cattle or horses, it must be assumed that this happened after the road was replaced by the new road, just before 1820. It would be tempting to imagine that the cooking pot was left in place when the inn was evacuated in 1819 and smashed deliberately to deter a return at the time that the slate roof was removed, shortly after the people left. Certainly, the only complete roofing slates found were covered in mortar, and thus hard to re-use, although many fragments of broken slate were found. It would seem likely that the Sutherland Estate undertook an exercise to remove the slate roof of the inn, and presumably re-use the slates elsewhere. Perhaps the door key was also left in place when the site was cleared of people, and simply discarded.

The existence of two folded discs, one a button and the other possibly a coin might relate to love tokens from the late eighteenth century. This would elevate the artefacts from the merely necessary and domestic and hint at something of the human spirit.

Finally, the copper alloy remains of a precision surveying instrument seems more likely to relate to the nineteenth century and the detailed surveys needed to build the railway. It is possible, however, that it relates to earlier surveys of the land, such as the Kirk estate survey of 1772, or even the military surveying parties sent out 1747-1755 by William Roy from Edinburgh Castle.

The trade patterns which had sustained Wilkhouse Inn, up to and through the Napoleonic wars, with its cattle stance to one side, were about to suffer a convulsive shift as 'Improvement' took a grip in the northern Highlands (Devine 2005). An agricultural economy based on subsistence farming carried on by a network of sub-tenants, which relied on the export of black cattle as the cash crop, was about to be replaced by huge

sheep farms, which were let directly to the highest bidders without consideration for family ties. The clan tacksmen who had formerly taken the leases and then sub-let to the clan members, who actually worked the land, were now displaced (Macinnes 1996). In large measure so were the vast bulk of the population. In the case of Sutherland, this involved the movement of most of the people from the interior of the county to the coast, to the Lowlands and abroad (Richards 2008). Therefore, the cattle drovers would soon be replaced by shepherds. It would not however be very long before the rail-heads pushed north, and even the long-distance movement of sheep became a thing of the past. Wilkhouse was forcibly closed by the Sutherland estate some fifty years before the railway came within 100 m of the ruinous building in 1870. There was to be no transition period for Wilkhouse, where the inn was sustained by the sheep trade in addition to general travellers in the mid nineteenth century. The documentary evidence, now supplemented by archaeological evidence, would suggest that the small settlement around Wilkhouse was forcibly ended in 1819. The roofs were removed, and the people scattered.

It is a matter of conjecture as to whether the re-location of the new road further up the hillside, as engineered by Thomas Telford and undertaken by the Commissioners of Highland Roads and Bridges, would have brought the inn to closure in any event, as happened elsewhere (Adamson and Bailie 2015). The new road was built just before the abrupt closure of Wilkhouse. By 1819, this new metalled road, which enabled wheeled traffic to travel rapidly over long distances for the first time, was complete all the way to Wick. To the south, the Dornoch Firth had been bridged at Bonar Bridge, and Loch Fleet was now crossed by 'The Mound' (Haldane 1973). At Wilkhouse, the road was approximately 450 m away up slope, and more importantly the inn was also out of sight from the new roadway. To compound matters the Sutherland Estate had built larger new inns at Golspie, Brora and Helmsdale. It might have been that Robert Gordon would have gone quietly bankrupt without being forcibly removed. He was not given that option however. In a real sense the formerly avant-garde Wilkhouse was bypassed, out of date and redundant.

Conclusion

The investigations at Wilkhouse have provided an insight into an eighteenth-century drovers' inn and its neighbouring buildings. However, it is more than that. The evidence points to continuity of settlement, combined with a building which was a clear statement of change.

There is evidence of continuity of human agency over a long period. The stone foundation of an earlier structure under Wilkhouse's north-east gable was discovered. The coin assemblage is testament to the long-term use of the drove road at least as far back as the late sixteenth century. Earlier antiquarian finds, nearby, indicate occupation in the Norse, Pictish and Iron-Age periods. The excavation then found new evidence of much earlier activity in the form of a buried Neolithic occupation layer below the outbuilding appended to the cattle stance enclosure.

The inn at Wilkhouse was a statement of modernity and affluence when built in the eighteenth century. It was constructed with harled stones making up the walls, lime mortar bonded walls outside and partially mortar rendered within, glass windows, double chimneys, and a slate roof. The level of investment suggests that there was ample passing trade to warrant the spend by the Sutherland estate. This was very much in contrast to the Tigh Caol inn (Adamson and Bailie 2013) in Argyllshire, which was essentially a longhouse built of drystone with wooden shuttered windows, low walls, two central hearths set on the floor, and probably with a turf or thatched roof. The Tigh Caol inn was also inconspicuous and was set in a natural amphitheatre, in contrast to the open, exposed and conspicuous nature of the Wilkhouse inn's setting. The neighbouring Gilchrist building revealed a much simpler structure with no mortared walls or render, although there was evidence for glass windows. Strangely, the assemblage from Gilchrist in terms of volume at least, was more indicative of the building's use as an inn than Wilkhouse. It is possible that this building was used in conjunction with the inn at busy periods, as well as supplying labour to assist the operation of Wilkhouse. The outbuilding behind the inn might have provided family accommodation for the inn, but more work is required to be certain of its function. The

outbuilding on the wall of the stance seems to indicate the provision of a byre or stable at one end, and domestic accommodation at the other.

In the same way that the nearby broch, above the raised beach, dominated the skyline at one time, the inn at Wilkhouse was extremely prominent, both for those approaching along the roadway as it made its way around the great curving bay, and from the sea. It advertised its flat and enclosed cattle stance with a plentiful supply of fresh water from its pond. It proclaimed itself as a dwelling of modernity, where the hospitality was likely to be of good quality in line with its evident facilities.

That process of change also brought about its demise. The roadway was moved up the hillside and out of sight. Competition from newer inns in Brora and Helmsdale would have been damaging. However, underlying these economic reasons for closure lay the demands of the Sutherland Estate. The Kintradwell estate, recently subsumed again into Sutherland ownership after a period in the hands of the Gordons of Carroll, was to be 'cleared' of its people. The inn would not be spared. Wilkhouse was to be forcibly closed in the name of 'Improvement'.

Acknowledgements

Bibliography

Primary sources

Archives

National Library of Scotland, Edinburgh. *Papers of the Sutherland Estate*. (Dep 313)

Maps

British Library, London. Roy, W 1747-1755 *The Military Survey of Scotland.*

National Library of Scotland, Edinburgh. Kirk, J 1772 *Survey of farms in Golspie and Loth Parishes.*

Secondary Sources

Adam, I J (ed.) 1972 *Papers on Sutherland Estate Management*. Edinburgh: Scottish History Society.

Adamson, D B 2014. *Commercialisation, Change, and Continuity: An archaeological study of rural commercial practice in the Scottish Highlands.* PhD thesis, University of Glasgow. Available from: http://theses.gla.ac.uk/5461/ [Accessed 10/06/2019].

Adamson, D B and Bailie, W 2015 The demise of Tigh Caol: an eighteenth-century drovers' inn. *Archaeology Reports Online 17*. Available from: http://www.archaeologyreportsonline.com/reports/2015/ARO17.html [Accessed 10/06/2019].

Awdry, C 1990. *Encyclopaedia of British Railway Companies*. Sparkford: Patrick Stephens.

Bailey, G 2004. *Buttons and Fasteners, 500BC – AD1840.* Whitham: Greenlight Publishing.

Bailie, W 2017 Wilkhouse, Brora. Unpublished Data Structure Report. GUARD Archaeology Ltd Report 4468.

Cappers, R T J; Bekker, R M and Jans, J E A 2006 *Digital Seed Atlas of the Netherlands,* Groningen Archaeological Studies 4. Eelde, The Netherlands: Barkhuis Publishing.

Devine, T M 2005 The Transformation of Scotland: Cultivation and Clearance, *in* Devine, T M; Lee, C H and Peden, G C (eds.) *The Transformation of Scotland*. Edinburgh: Edinburgh University Press.

Egan, G 2005 *Material culture in London in an age of transition: Tudor and Stuart period finds c. 1450 – c. 1700 from excavations at riverside sites in Southwark* - MoLAS Monograph 19. London: Museum of London archaeology Service.

Fairrie, A A 1991 *The Militia, Fencibles and Non-Regular Forces of Inverness-shire, from the Napoleonic War to 1914.* Inverness: Inverness Field Club, 75-90.

Ferguson, N 2013 *Treasure Trove Report: Folded silver coin of Louis XVI.* Crown Office.

Ferguson, N 2016 Conservation through recognition: material culture research as a heritage management tool for conflict sites, *in* Smith, S D *Preserving fields of conflict: Papers from the 2014 Fields of Conflict Conference and Preservation Workshop*. University of South Carolina, Columbia, South Carolina, 17-23.

Haldane, A R B 1973 *New Ways through the Glens*. Newton Abbot: David and Charles.

Henry, F 1952 A wooden hut on Inishkea North, County Mayo, *Journal of the Royal Society of Antiquaries of Ireland* 82, 163-178.

Hewitt, R 2010 *Map of a Nation: A Biography of the Ordnance Survey*. London: Granta.

Keegan, T 1974 *The Heavy Horse: Its Harness and Harness Decoration*. London: Pelham Books.

Kelleher, R 2012 The re-use of coins in medieval England and Wales c.1050–1550: An introductory survey, *Yorkshire Numismatist* 4, 183-200.

Loch, J 1820 *Improvements on the Sutherland Estate*. London: Longman, Hurst, Rees, Orme, and Brown.

Macinnes, A I 1996 *Clanship, Commerce and the House of Stuart*. East Linton: Tuckwell Press.

Morrison, A 2008 *The Defence of Scotland - Militias, Fencibles and Volunteer Corps, 1793-1820.* Available from: https://www.scribd.com/doc/68100606/The-Defence-of-Scotland-Militias-Fencibles-and-Volunteer-Corps1793-1820. [Accessed 10/06/2019].

MPRG 1998 *A Guide to the Classification of medieval ceramic forms.* London: Medieval Pottery Research Group.

MPRG 2001 *Minimum Standards for the processing, recording, analysis and publication of post-Roman ceramics*. London: Medieval Pottery Research Group.

Richards, E 2008 *The Highland Clearances*. Edinburgh: Birlinn.

Sage, Rev D 1899 *Memorabilia Domestica: or, Parish Life in the North of Scotland*. Wick: William Rae.

Salaman, R A 1975 *Dictionary of Tools used in the woodworking and allied trades, c.1700-1970.* London: George Allen & Unwin.

Schweingruber, F H 1990 *Anatomy of European Woods.* Berne and Stuttgart: Haupt.

Smith, C 2012 Final Report on Animal Bones from Brora Back Beach, Seasons 2007-2011. Specialist Archive Report for SCAPE Trust.

Stace, C 1997 *New Flora of the British Isles.* 2nd Ed. Cambridge: Cambridge University Press.

Ziderman, I I 1986 Purple dye made from shellfish in antiquity, *Review of Progress in Coloration* 16, 46-52.

Appendices

Appendix 1: Total number of animal bone fragments in Wilkhouse and Gilchrist trenches

species	Wilkhouse no of fragments	Gilchrist no of fragments	Total no of fragments
sheep/goat	15	2	17
cattle	2	1	3
pig	1		1
rabbit	20		20
small ungulate	12	5	17
large ungulate	6		6
indeterminate mammal	128	20	148
fowl	5	1	6
auk	8		8
wader	1		1
fulmar	1		1
small duck	1		1
indeterminate bird	1	1	2
fish	265		265
total	466	30	496

Appendix 2: Total numbers of mollusc shells and crustacea - Wilkhouse and Gilchrist trenches

Species	Wilkhouse no of fragments	Gilchrist no of fragments	Total no of fragments
whelk(or wulk; Littorina littorea): apices	10	165	175
whelkor wulk: fragments	1	46	47
flat whelkL. obtusata	1		1
dog wilk/Nucella lapillis	1	2	3
limpet/Patella sp: apices	6		6
limpet: fragments	4		4
cockle/Cerastoderma sp: hinge	2		2
cockle (fragments)	33		33
otter shell/Lutraria lutraria: fragment	1		1
mussel/Mytilus edule: hinge	1		1
mussel: fragments	3		3
land snail (fam. Helicidae)		2	2
crustacean: chela	1		1
Total	64	215	279

Appendix 3: Pottery fabric types

Fabric Types	Total Sherds	Rims	Bases	Handles	Body Sherds	Weight (g)
White earthenware	296	45	21	6	224	757
Pearlware	1	0	1	0	0	2
Red earthenware	42	7	4	0	31	474
Industrial stoneware	2	0	0	0	2	67
Tile	1	0	0	0	1	21
Total	342	52	26	6	258	1321

Appendix 4: Catalogue of glass finds at Wilkhouse and Gilchrist

Catalogue Abbreviations:

WB: wine bottle
WG: window glass
DV: drinking vessel
SR: string ring
FB: firebright

Note: The expression 'orange peel' appears in a few places. This is where the shard has a surface resembling orange peel caused by the mould not being at the right temperature. From about 1740 wine bottles were blown in dip moulds presumably to try to standardise capacity but the necks and lips were hand tooled.

SF No	Context	
121	101	3 shards WG, type B, 1.1 mm thick
		Damaged WB lip, very dark green (black), late eighteenth/early nineteenth century
122	101	WB neck shard possibly from same bottle as 121.
123	107	Body shard WB, dull mid green,late eighteenth/early nineteenth century
124	118	Shard WB, dull green, moderate corrosion, eighteenth century
125	119	Shard WG, type M, 1.6 mm thick
126	199	4 shards WG, type D, up to 2.6 mm thick
		5 shards WG, type B, 1.3 mm thick
		4 shards WG, type C, 1.6 mm thick
		2 Tiny shards WG, possibly type F
		Tiny bottle shatter shard
		Tiny shatter shard
		Part base from moulded bottle, clear, mould line, nineteenth century
		Part foot from stemmed DV,clear, unfinished pontil so probably c. 1750-1780
		4 small thin clear vessel wallshards
127	115	Shard WB, dull pale green, moderate corrosion, eighteenth century
128	119	Small shard WG, type N?, 1.7 mm thick
129	119	Shard WG, type M, 1.7 mm thick
130	119	Shard WG, type F, 1.6 mm thick
131	160	Two shards cobalt blue bottle, nineteenth century
		2 shards WG. type C, 1.5 mm thick
132	152	2 tiny shards WG, type F?, 1.3 mm thick
133	143	Shatter shard
134	149	Shard WG, type N, 1.2 mm thick
135	143	Shard WB, moderate to heavy corrosion, probably eighteenth century
136	143	Neck shard WB, dull green, light to moderate corrosion, probably late eighteenth century
137	149	Shard WG, type N, 1.2 mm thick
138	143	Shard WG, type N, 1.6 mm thick
139	152	Shard WG, type K, 1.9 mm thick
140	143	Small shard clear vessel rim, heat damaged
141	143	Part WB lip sheared off just above SR, enhanced lip moderate corrosion, late eighteenth/early nineteenth century
142	152	Shard WG, type M, 1.7 mm thick
143	152	Shard WG, type M, 1.6 mm thick
144	152	Shard WG .type M. 1.9 mm thick
145	152	Shard WG. type N, 1 mm thick
146	152	Shard WG, type M, 2.1 mm thick
147	152	Small shard WB, moderate corrosion, probably eighteenth century
148	143	4 shards WG, type K, 1.6 mm thick
		Shard WG, type F, 1.6 mm thick
		3 shards WB, probably late eighteenth/early nineteenth century
		2 heat damaged WB shards

Appendix 5: Window glass matrix

Contexts	Wilkhouse											Gilchrist											MD 097	Type
Glass Type	101	103	104	116	117	119	143	149	152	156	160	1	3	4	14	22	24	25	28	29	30	43	MD 097	
A																								
B	3		1+20?			5				1		5			1				5	1		3	2	Kelp
C			1			4	2				2	1			1			2	1					Kelp
D	1					4				1		2		8	3		4	10			1			Kelp
E	1																	6						Kelp
F		3				3	3		2						1	2			1					Hybrid
G				4	1							1												Kelp
H													4											Kelp
I														5				14						Kelp
J												1												?
K							4		1															Kelp
L												1												Hybrid
M						2			4															Hybrid
N						1	1	2	1															Hybrid

Notes: kelp fluxed glass c.1700-c.1835, hybrid c. 1650-c. 1700

Appendix 6: Metalwork finds from excavation and metal detecting survey

Type	SF No	Context	Measurements (mm)	Weight (g)	Description
					Excavation Finds
Non ferrous					
Button	175	20	15.7 x 2.2	2	Small copper alloy button with complete integral loop. Corrosion on facing, but likely to be plain rather than decorated. c.nineteenth century.
Pins					Four round headed pins, solid head with encircling groove. Pin shaft is circular in section with all but one (194) with broken shaft or bent at a right angle. Regularity in composition and size, 31 mm by 1.2 mm indicates mass production. Such items were ubiquitous and regularly used to pin items of clothing and dress. Significant volumes are recovered in excavations of eighteenth - nineteenth century burials in which pins are used to secure shroud cloths in the East Kirk of St Nicholas, Aberdeen (Arabaolaza pers. comm 2018). c. mid-eighteenth - nineteenth century.
	172	119			Pin head, shaft fragile and broken during recovery.
	173	104	3.1 x 1.1		(Plate 14)
	174	143	3.1 x 1.2		(Plate 14)
	194	119	3.1 x 1.2		(Plate 14)
Buckle	193	143 (WBT 3)	26.6 x 1.7	2	Cu alloy strip with square section and one end curved, the other end distorted. Fragment of buckle pin c. eighteenth - nineteenth century.
Miscellaneous					
	41	45	160 x 95 x 2		Cu alloy plate cut into sub-oval shape. Outline is irregular, but appears to be cut specifically to fit requirement. Plate is fixed by rivets with circular section and fitted and spaced but irregular intervals. The rivets are hammered from one side. Concretion, possibly leather remains, one side and surrounding rivets. Bespoke Cu alloy patching plate with leather elements c. Post-medieval – early Modern (1700-1900). (Plate 14).
	195	119	28.7 x 2.5	2	Copper alloy ring or hoop with circular section and slight ridge defining an edge. Distortion of shape with elongation at one end indicating stress. Attachment hoop, c.nineteenth - twentieth century
Non-metal					
	176	119 (WBT 1)	11 x 1.9		A small flat bone button back with smooth rounded edges and circular central inset on one side. There are three drilled holes in a row, but slightly offline. Inset either decorative or used primarily to position holes, or both. The front facing holes remain neat, whereas the rear holes are misshapen indicated wear. Natural striations of the bone visible. Bone button, late seventeenth - nineteenth century (Post-medieval).
	196	119 (WBT 1)	14.3 x 1.5		Carved bone plate fragment with square section body and oval shaped terminal end. Body with traces of fine flat teeth closely spaced. No indication of decoration on terminal or traces of pins or rivets. Fragment of bone comb, late seventeenth - nineteenth century (Post-medieval). (Plate 14)
					Metal Detecting Survey Finds
Ferrous					
Pot foot	3		37.2 x 0.5		Cast iron foot with D shaped section and three small pointed decorative toes at base. Attached to part of base rounded. Cast iron cauldron foot, c.mid - nineteenth century
Large horse-shoe	6		143 x 13 x 27		Wrought iron. Large-horse shoe with rectangular section and toe. c.nineteenth - twentieth century.

Type	SF No	Context	Measurements (mm)	Weight (g)	Description
Key	77		104 x 13.5		Wrought iron. Fragmented with cylindrical hollow shaft surviving together with broken circular bow which is wide but in poor condition. Square plate, possible plate mid shaft, but could also be corrosion. Iron key fragment, c. Post-medieval to early Modern (1700 – 1900).
Non-ferrous					
Buttons	9		16.2 x 0.8		Cu alloy. Small button with trace of nickel plating. On reverse soldered wire shank and loop. Late eighteenth - nineteenth century.
	10		24.5 x 1	4	Cu alloy. Large button with plain flat facing and nickel plating on both sides. On reverse a conical casting reservoir with inset wire loop. Late eighteenth - nineteenth century.
	18		27.1 x 1.1	6	Cu alloy. Large button with plain flat facing and filed wedge-shaped border. On reverse a conical casting reservoir with inset wire loop. eighteenth - nineteenth century.
	19		27.4 x 0.9		Tombac (zinc alloy). Fragment of large tombac button with shaped moulded border. c. eighteenth century.
	24		25 x 1		Cu alloy. Large button with convex facing, or possible backing for two part button. Condition poor with corrosive product on both sides. Thick arch-like Integral loop on reverse. nineteenth century.
	61		13.6 x 1.1		Cu alloy. Small button with flat facing. Maker's mark on reverse and possible gilding mark. Soldered shank and loop on reverse. Late eighteenth - nineteenth century.
	62		23.1 x 1	4	Cu alloy with nickel plating. Large button with nickel plated facing in a scratched and pitted condition. The shank and loop is broken, with trace of casting reservoir and remains of inset wire loop. Button facing with smooth rounded edges, slight wear on border. Polish spinning marks on reverse visible under corrosion. c. late eighteenth - nineteenth century.
	47		19.4 x 1.2	2	Cu alloy. Small button with concave shaped facing. Casting reservoir on reverse with inset wire loop missing. c. late eighteenth - nineteenth century.
	67		18.7 x 1.1		Cu alloy. Small button with flat plain facing. On reverse small conical reservoir with wire shank and trace of fabric within loop. c. late eighteenth - nineteenth.
	72		22.3 x 4	2	Two-part; tombac (Cu alloy) with bone backing. Button with metal facing and bone backing with four attachment holes, positions outlined with in circle. Green copper staining on bone border. Condition is poor but clearly a quality piece.
	79		29.2 x 12.9 x 0.8		Cu alloy. Large button with missing soldered shank, scar visible on reverse. The facing is bent inwards towards the shank, with one edge visible. Nature of the bend suggests deliberate folding. Trace of fine punch decoration visible on facing: small consistent punched dashes around outer edge and motif in the centre, possible heart-shape. c.mid - late eighteenth century.
	82		16.3 x1.1		Cu alloy. Small button with flat facing and fine wavy border decoration, almost floral motif. On reverse conical casting reservoir with inset wire loop. c.eighteenth - early nineteenth century.
	85		14.1 x 1		Cu alloy. Small button with nickel plating. On reverse small casting reservoir with wire loop. c.eighteenth - nineteenth century.
	86		26 x 1		Cu alloy. Large button with slight concave plain facing. Soldered loop and shank on reverse. nineteenth century.

Type	SF No	Context	Measurements (mm)	Weight (g)	Description
	89		22 x 1.6	4	Cu alloy. Large complete button with nickel plating on facing and reverse. Button facing thick with slight concave on reverse towards shank, front facing is flat. Casting on reservoir on reverse with inset Cu alloy wire shank. Late eighteenth - nineteenth century.
Military buttons	59				Cu alloy with possible traces of gilt. Slight concave facing and soldered shank and loop present. Seam visible on reverse, possible re-striking of motif. Central motif SDF letters set centrally within 'Order of the Thistle' device. Military button of 'Sutherland Fencibles', possible officer's button c. 1793-1801. (Plate 14)
	90				Lead alloy (pewter). Surviving button core in poor condition with lamination of lead. Casting reservoir visible on reverse with broken shank. Central cast motif SDF set centrally within 'Order of the Thistle' device. Military button 'Sutherland Fencibles' c. 1793-1801 (Plate 14).
Buckles	49		16.6 x 7.7 x 0.9		Fragment; Cu alloy. Stamp decorated sheet Cu alloy metal with star and dot motif. Fragment of buckle c. mid-nineteenth - twentieth century.
	51		46.2 x 2		Cu alloy. Buckle with curved profile and with openwork decoration in floral design. Pin holder on reverse. Decorative shoe buckle c. mid eighteenth - nineteenth century.
	74		48.5 x 2		2 x fragments; Cu alloy. Sub-rectangular, oval section which is curved in profile. Rounded edges and moulded dot and border motif in relief. Pin holder visible on reverse on both fragments. Decorative shoe buckle c. mid eighteenth - nineteenth century.
Strap fittings	58		34.2 x 25 x 0.6		Measurement as 1 plate
	65		38.6 x 29.4 x 5		Measurement as 2 affixing plates with leather
	69		38.5 x 26 x 0.6		Measurement as 1 plate
					Cu alloy with iron rivets. Sub-triangular or trilobite strap fittings composed of 2 Cu alloy plates fastened through leather – 065 with surviving leather fragments, by iron pins or rivets at 4 points. Borders folded over to join adjacent plate.
Thimbles	11		21.3 x 17.3 x 1		Cu alloy sheet. Stamped Cu alloy sheet shaped into sub-conical form with domed top. Concentric punched decoration with even spaces and lines. Space and border with edge folded over to finish. Dome top is very worn. c. nineteenth - twentieth century.
	84		23 x 16.2 x 0.5		Cu alloy sheet. Stamped cu alloy sheet metal shaped into sub-conical form with flat top. Fine, but uneven, hand punched decoration in two sets with strokes and circles. The top is very worn with decoration faded. Small hole punched at base rim added as later addition as over decoration, possibly an attachment hole. c.eighteenth - nineteenth century.
Lead projectiles	64		13.1	12 g 0.4 oz	Lead. Small pistol ball with bar sprue and casting seam visible. Small undefined lump next to sprue, possibly representing a casting error with leaked lead. No visible impact deformation, but small scuff removing patina related to post deposition or during recovery. Small pistol ball with bar sprue and casting seam visible. Small undefined lump next to sprue, possibly representing a casting error with leaked lead. No visible impact deformation, but small scuff removing patina related to post deposition or during recovery. Possibly eighteenth century.
	50		10 x 14.3 0.39 in	8 g 0.3 oz	Conical bullet, revolver or sporting rifle, with skirt base. Striations around body indicating firing.

Type	SF No	Context	Measurements (mm)	Weight (g)	Description
Miscellaneous	66		73.4 x 13		Measuring instrument: dividers/callipers; Cu alloy. Fragment with circular head and concentric rotational joint. Remains of extending legs cast moulded with flat curving edges which are hand finished as indicated by rasp striations. One arm broken with triangular section. Slight bend towards terminal point. Well-made precision instrument in bronze. c. eighteenth - nineteenth century.
	68		26 x 1.8	8	Folded disc, Cu alloy, folded in middle, then outer edge folded over creating flat curving surface. Disc is possible coin or button, but coin is more likely. Surface is corroded and no surviving indication of surface markings or decoration. Bending would have taken effort as it has been neatly folded. Post-medieval. (Plate 14).
	12		43.8		Handle, Cu alloy (bronze). T – bar handle with shaped edges and circular profile, possible handmade. Shaft is broken. Possible instrument handle such as a clock winder due to quality, c. eighteenth - nineteenth century.
	71				Small fragment of Cu alloy band, oblong in shape with rounded ends. One long side crimped and with four hand punched attachment holds. Strap fitting, c. nineteenth century.
	83		27.3 x 2.4		Cu alloy hoop with circular section. Strap fitting, c. nineteenth - twentieth century.