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Excavation of two burials at Galson, Isle of Lewis, 1993 and 1996

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with contributions by M Church, T Gabra-Sanders, F Hunter, M Johnson & A N Smith

ABSTRACT

Two burials of Iron Age date were recorded at Galson during rescue excavations in 1993 and 1996, as a result of erosion of the steep, north-facing sand-dune face, which rises over 6 m between the shingle beach and a field wall. This erosion face is the site of a well-known cemetery and settlement extending in date at least from the Iron Age to the Norse period. The burials are placed in the context of past discoveries at Galson and a brief consideration of the evidence for long cist cemeteries in the Western Isles is presented. The excavations were funded by Historic Scotland.

INTRODUCTION

Coastal erosion is one of the most serious threats to archaeological monuments in Scotland and there is no sign of its abating (Ashmore 1994). It is a particular threat in the machair dune systems on the west coast of the Outer Hebrides. The rate of dune erosion has been increasing since the landward area was drained in the 19th century (Gilbertson *et al* 1995, 23). Without moisture, the sand is easily eroded by wind, which undermines the grass binding it together on the surface. Monitoring the erosion is like painting the Forth Bridge. Whilst such measures as the Coastal Surveys of 1978 and 1996 (Cowie 1994; Burgess & Church 1997) are clearly of use in assessing the scale of the problem, these one-off survey projects have been too inflexible to allow, for instance, for revisits immediately after violent storms. Thus, chance discoveries by the general public and the regular monitoring of key sites by the local amateur network represent an essential level of protection for the coastal archaeological resource. A number of rescue excavations have taken place in recent years on sites observed by passers-by. These include previously unrecognized sites, such as the Viking Age cemetery at Cnip (Welander *et al* 1987; Dunwell *et al* 1995a) and elements of the long cist cemetery and settlement at Galson (Ponting 1989 and this report).

The presence of archaeological remains at Galson has been known since at least 1914 (Edwards 1924). Since Edwards' examination of an earth house in 1923, various small-scale excavations and recording exercises have taken place, principally of long cists which have been

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observed eroding from the dune face (Stevenson 1952; NMRS ref NB 54 NW 2, 1969; Ponting 1989) (NGR NB 436594).

This paper presents the results of the excavation of two such chance discoveries, places them in the context of past discoveries, assesses the significance of the presence of a long cist cemetery in the Western Isles and discusses the implications of the piecemeal investigations of this site. The diet of the individuals buried at Galson is discussed, with particular reference to the proportion of seafood in their diet and the effect this may have on the relationship between the radiocarbon determinant and real date of death.

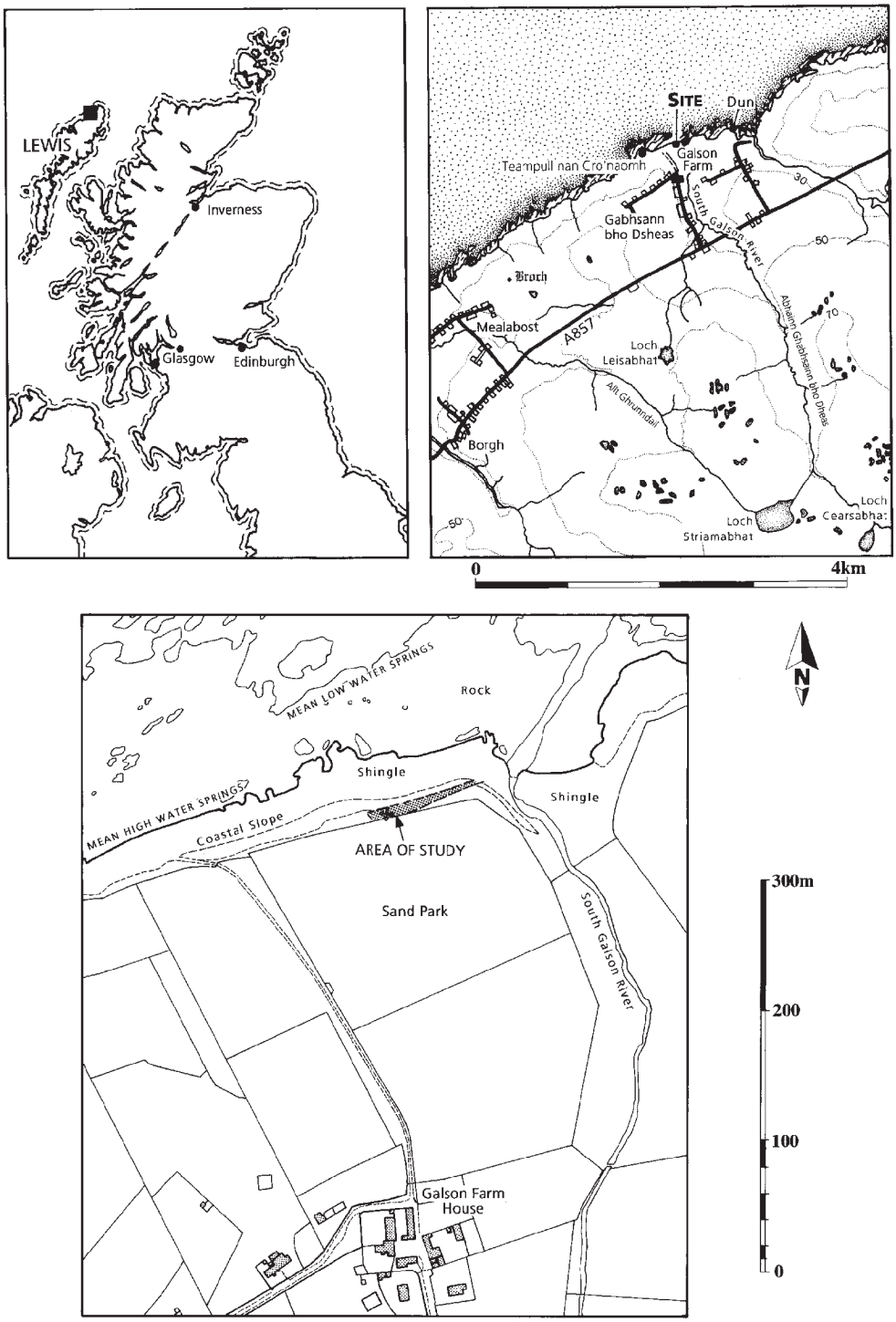
PREVIOUS ARCHAEOLOGICAL WORK AT GALSON

A number of archaeological sites have been observed at Galson (illus 1). A ruinous dun or Atlantic roundhouse lies on a slight headland at the south edge of the small bay to the north of the North Galson River (Cowie 1994, 22). A chapel and graveyard at Teampull nan Cro'Naomh are located on a slight knoll (ibid, 27). Between the dun and the chapel lies the site of an eroding settlement and long cist cemetery, which sit on a raised beach.

The last mentioned site is visible in the eroding dune located between the road from South Galson farmhouse to the west and the mouth of the South Galson River to the east. The dune runs for c 150 m and rises up to 7 m between the shingle beach and a dyke, which defines the northern extent of a field known as Sand Park. The dune face is eroding at a variable rate. Cowie (ibid, 27) suggests that the destruction is 'gradual rather than catastrophic'; an impression borne out by comparison of the first edition Ordnance Survey map with the current edition, for the position of the dyke that defines the northern extent of Sand Park has not changed from that shown in 1860.

A number of archaeological discoveries have been reported from the erosion of the dune face at Galson since early in the 20th century. In 1922, John Morrison, the tenant of the farm at Galson, and Norman Mackay, his cousin, sent a number of artefacts to the National Museum of Antiquities in Edinburgh. This collection (the first of many collections of surface finds) included a ring-headed bronze pin, several sherds of pottery and a number of bone and antler artefacts. The donation of the finds and the presence of a kitchen midden prompted the first excavation, which was undertaken by Edwards (1924) in 1923. The excavations revealed an open hearth on a stone and clay floor; indeterminate stone structures with clay floors; a curvilinear wall; and an earth-house, with four cells and 'subterranean passage' (ibid, 190). The dimensions of the passage are commensurate with its interpretation as part of a drainage system (Cowie 1994) and it is probable that the plan of the earth-house drawn by Edwards and reproduced here at smaller scale (illus 7) is a highly idealized representation of a more irregular cellular structure, or possibly even the piers of a wheelhouse (S Gilmour, pers comm). Although Edwards (ibid) suggested that the earth-house was subterranean, the level of the probable drain suggests that the structure had originally been mostly projected above ground. Sadly, it has now eroded completely. Finds from the house and associated midden included saddle and rotary querns, ring-headed bronze pins, a small iron knife, a probable clay loom weight, antler and bone artefacts, decorated and plain pottery and a silver coin of Eadgar (AD 957–75). The coin was found in the midden (Edwards 1924, 202).

In 1933 and 1935 small-scale excavations, with primarily geological goals, were undertaken on the same site (Baden-Powell & Elton 1937). Four small trenches were designed to reveal the stratigraphical relationship of the midden to the raised beach. A bronze pin and Iron Age pottery of broch and wheelhouse types were found.



ILLUS 1 Site location map (*Based on the Ordnance Survey map © Crown copyright*)

In 1946, the first burial at the site was reported by Dr R S Doig, Medical Officer of Health at Stornoway. In 1948, 1949 and 1952 several long cists were excavated by Stevenson (1953). Further burials have been noticed, and some have been excavated at intervals since Stevenson's excavation, including a small cist containing a baby's skeleton (NMRS ref NB 54 NW 2, 1969) and four east/west-aligned long cists (Ponting 1989). The two burials which form the substance of this report bring the number of burials recorded at Galson up to 14.

LAYOUT OF THIS REPORT

The primary concern of this report is the two burials recorded in 1993 and 1996 (GALS 93 & GALS 96). Inevitably during the excavations finds were recovered from other layers, which together with the results of soil sample processing add another level of data. Rather than clutter the account of the two burials with information related to layers and features above and below them, reports on material not directly associated with the burials have not been included. It is proposed to incorporate them in a synthetic report, summarizing all the work undertaken at Galson. Context numbers for all layers have been placed in parentheses in the following text where appropriate.

EXCAVATION OF A BURIAL IN 1993 (GALS 93)

Carol Knott & Tim Neighbour

The burial was discovered by Mr and Mrs J Russell on 31 January 1993. They found a complete, decorated pot apparently balanced precariously on the sloping dune face. When they removed it, they discovered that it concealed a human skull. Carol Knott and the Lewis and Harris Archaeology Group were alerted to the discovery. The pot was presented to Museum nan Eilean and at the time of writing is on display in the ground-floor gallery.

Rescue excavation was carried out by Carol Knott and the Lewis and Harris Archaeology Group. Scaffolding was erected against the dune face to facilitate access to the grave. The burial was recorded in plan and profile and by a series of colour slides.

THE GRAVE

The long axis of the grave ran parallel to the erosion face. The cut for the grave (335) was a shallow, rounded pit not much larger than the skeleton it contained. The grave was aligned roughly east/west and measured 1.45 m by 0.50 m. The grave-pit had been dug through compact brown sand (323) and was filled by similar material (324) and was unlined. Excavating a partly eroded burial on a shallow slope is not ideal and can hamper interpretation. Two flat stones (329 & 331) were present c 1.2 m above the base of the grave. It was considered possible that they may have been part of a feature which either marked this grave, or a grave further to the south. However, most of the graves at Galson were discovered at roughly the same level (illus 8), suggesting that they may have been very close to the ground surface at the time of burial (greater variations in depth would be expected if burials had habitually been set deep). Thus, it is considered more likely that the stones are unrelated to the cemetery. The layout of the cemetery at Galson is discussed in more detail, below.

THE BURIAL

The inhumed skeleton at the base of the grave was an adult male laid on his right-hand side, extended with his legs slightly flexed and his skull at the west end of the grave. A complete pot was found near the skull and removed, as noted above. A rough bone pin was found at the back of the skull and a corroded penannular iron brooch at the front of the neck.

OTHER DEPOSITS

The excavated grave lay beneath an exposed sequence of wind blown sand layers (326–329 & 332), two flat stones (329 & 331, discussed above) and a small portion of dry stone wall (illus 2).

FINDS

The artefacts recovered from the burial comprise a decorated pot (illus 3), a rough bone pin and a penannular brooch (illus 4). Pot sherds were also recovered from layers above and below the grave. A single sherd was discovered balanced on the left tibia of the burial and is probably intrusive.

The Pot (illus 3)

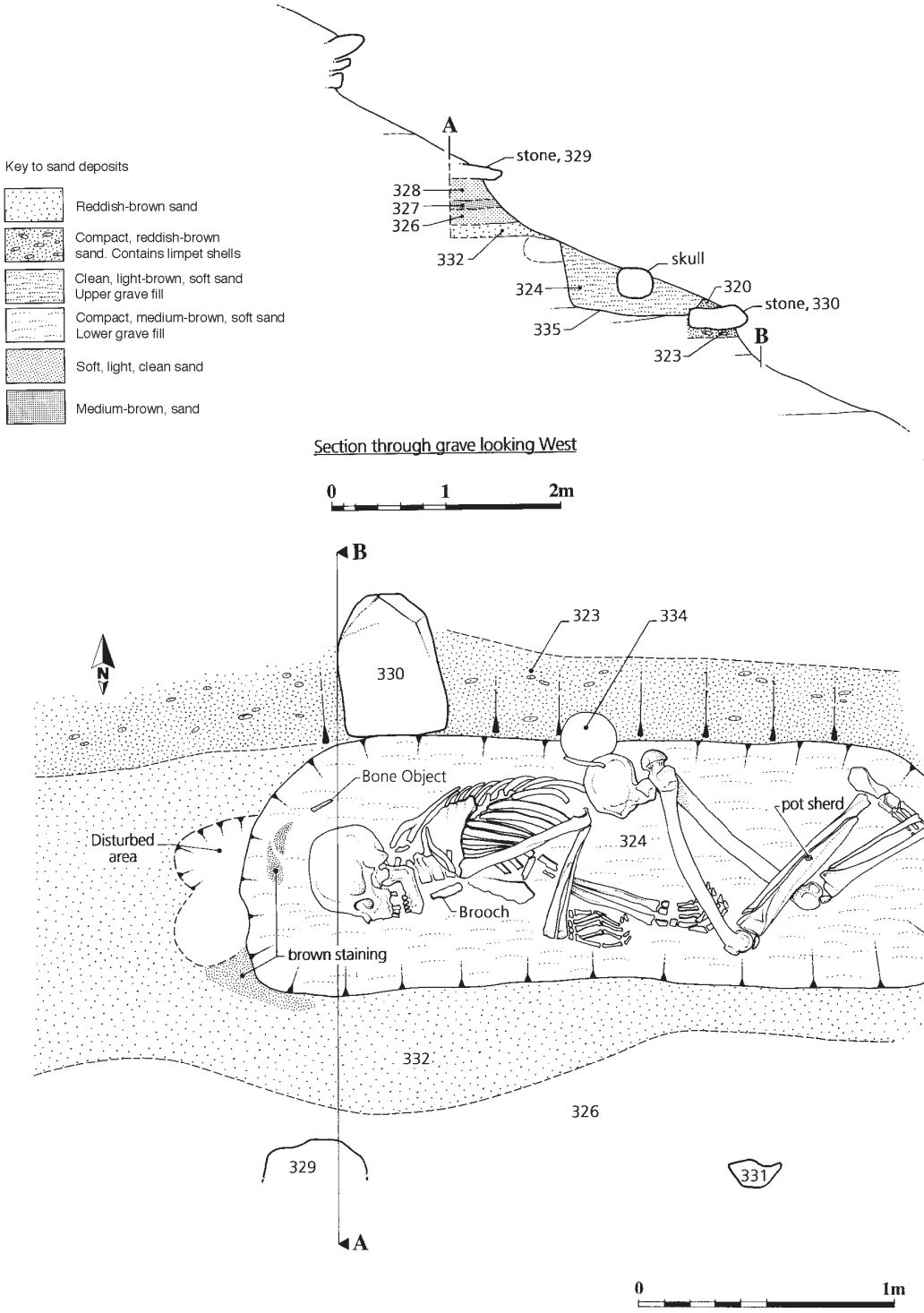
Melanie Johnson

The vessel which accompanied the burial is a very finely made small globular pot with a flat base and everted rim. It measures 110 mm in height, has a rim diameter of 90 mm, a base diameter of 55 mm, and a girth of 110 mm. There is incised decoration on the upper part, consisting of an incised triple zigzag running continuously around the vessel, underlined by a single incised line, while in the angle of the rim there is a continuous row of dots. The decoration is lopsided, becoming smaller and narrower on one side. The exterior has been wiped in two different ways while in the leather-hard stage, to provide a deliberate contrast, which highlights the decoration, and in itself has an almost decorative effect. The exterior of the body has been wiped very roughly, probably with a pad of grass, whilst there is much finer, barely noticeable, wiping around the rim and beneath the decoration on the upper part of the body.

The pot shows no evidence of use, being very clean with no residues or sooting visible. There is a fire-cloud on the exterior, which is a result of the firing process in an open fire or a simple pit kiln. The pot is coil built. The joins between coils are visible as ridges in the clay on the inside of the pot. The vessel is in a very good condition, stable and free of cracks, and seems to have suffered very little abrasion, with some present on just one small portion of the rim. This suggests that the vessel was manufactured specifically for burial.

The vessel form, globular with an everted rim, is current throughout the Iron Age, but on the basis of the decorative motif, a date prior to AD 300 can be suggested for the pot buried at Galson. Incised decoration, at present, appears to be restricted to the Middle Iron Age, contemporaneous with Complex Atlantic Roundhouses, although very little is yet known of the earliest Iron Age pottery types. The motif incised onto the Galson pot is very typical of this period. Subsequent to this period, decoration switches to a heavy reliance on applied motifs, particularly cordons, which can often be found in conjunction with channelled decoration (Armit 1992, 143–4; see also Sollas wheelhouse: Campbell 1991, 148–57; Dun Bharabhat and Loch na Berie: Johnson 1996, 37–9 and D Harding, pers comm). However, as yet there is no securely dated typology of pottery from the Western Isles for this period.

Furthermore, this is the only vessel currently known from an Iron Age burial context within the Hebrides, and thus the presence of this vessel within the grave at Galson is unique. Several features of the vessel indicate that it was intended as an original accompaniment to the burial: the vessel has not been used and is very clean, and the vessel is whole and free of abrasion. It is very unusual to find complete pots on



ILLUS 2 Burial, Gals 93: plan and profile

ILLUS 3 The pot accompanying Gals 93

Iron Age sites as they tend to be highly fragmented through breakage and disposal, and vessels are very often encrusted with charred residues indicating their use in cooking. The almost pristine condition of this pot indicates that it has not been used for cooking and has not suffered abrasive forces in the manner of ordinary domestic waste. It is most likely that the pot was constructed specifically for inclusion in the grave, perhaps containing a food or liquid for the deceased which had not been prepared in that particular vessel. The vessel could perhaps have been an heirloom, but the close correspondence in dates between the skeleton, the pot and the other grave goods suggests otherwise.

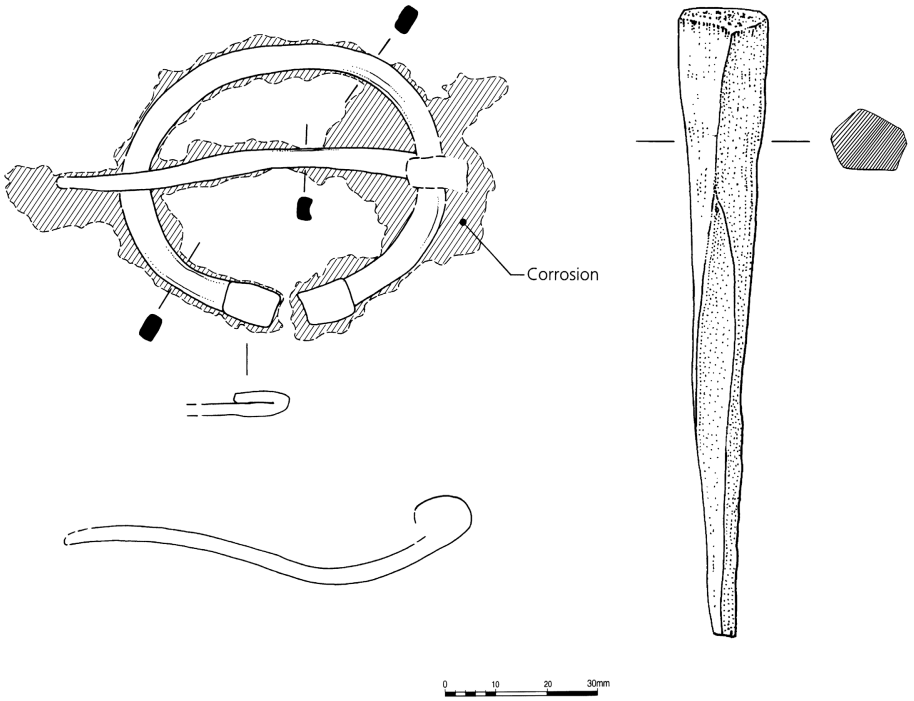
It is interesting that this pot, although unusual in being unused and included within the grave, does not display any differences in form or decoration to other vessels of this period found on settlement sites.

Fabric: hard, sandy, very finely made. Unoxidized. External face yellowish-brown (10YR 5/6), internal face grey (10YR 5/1). Inclusions visible: grass marks on interior, some stone protruding through surface, 1% quartz and mica <2 mm.

The brooch (illus 4)

Fraser Hunter

An iron penannular brooch, heavily corroded, was found in front of the skeleton's neck. It is of Fowler (1960) Type D, with terminals folded back c 10 mm against the hoop; they appear to be undecorated. The oval hoop is forged from a rectangular-sectioned strip, c 4 mm wide and 2.5 mm thick. Details of the pin are obscured by corrosion, which preserves mineralized textile traces, but it is flat, with a forged channel on the underside. It has a slightly concavo-convex curve, dipping from the loop and rising over the hoop at the point. As worn the pin point was to the wearer's right. The brooch's position in the burial and the textile remains indicate it fastened clothing, probably a cloak, at the neck. It could also be for a shroud, but this seems a less likely option, as there would be no necessity for this to fasten at the neck.



ILLUS 4 Artefacts recovered with Gals 93: (1) penannular brooch; (2) bone or antler pin

Dating such simple forms of brooch with any precision is tricky, as the types have a long life. Fowler (1960) gives a first century BC to third century AD date; the radiocarbon date for the burial puts it into the latter half of this range. The brooch lacks the strongly humped pin and markedly spade-shaped tip of the earliest penannulars, while the simple terminals indicate a date before the main (post-Roman) floruit of elaborate penannular brooches. Similar Scottish examples are very rare, with only two parallels: a copper-alloy D-penannular from Midhowe broch, Orkney (Callander & Grant 1934, 500–1), and an unpublished iron D-penannular from Newstead Roman fort, Roxburghshire, of the late first to second century AD (NMS FRA 821). Both are smaller than the Galson example, Newstead being 34 mm in diameter and Midhowe 24 mm. In general, iron penannulars are markedly less common in Scotland than copper-alloy ones, probably due to differential survival, and even on a British scale further parallels are rare (although note one in a second century AD context near Dorchester, Dorset: Smith *et al* 1997, fig 74, no 8). The Galson find is a valuable addition to our knowledge.

Dimensions of the hoop are: external diameter 45 mm by 40 mm, W 4 mm, T 2.5 mm; and of the pin are: L 59 mm, W 2.5 mm, T 2.5 mm.

Textiles attached to the brooch (not illus)

Thea Gabra-Sanders

The brooch, examined after conservation, is covered in remains of disturbed mineralized fibres and yarns, mostly situated around both ends of the pin.

The pin, near the ring, is covered with a small area of disturbed fibres. On the opposite side are six Z-spun yarns lying vertically and four disturbed yarns horizontally. Areas of disturbed fibres are situated on the ring near the pin and on either side of the gap in the ring. On the same side is a fragment of straw.

Near the ring, the pin has two disturbed yarns and a small fragment of Z-spun yarn. At the other end of the pin is an area of disturbed yarns with, lying above this, an area of probable roots and on the inside of the ring various disturbed fibres. On the ring near the pin are two small areas of very disturbed yarns.

The presence of organic matter, in the form of mineralized yarns and fibres, indicates that the brooch was on the clothing of the deceased at the time of the burial.

Bone or antler pin

Andrea N Smith & Tim Neighbour

A measured sketch of the pin, made at the time of the excavations by Carol Knott, is all that remains of this artefact. As the pin is not available for direct examination, any identification of material has to be rather speculative. It could be from a cattle-sized long bone, but even then, the thickness (at about 8 mm by 10 mm max) is at the upper limits of what could be got from the thickness of a long bone shaft. For this reason the pin is rather more likely to have been made from antler than bone, but this is not based on direct observation.

The pin is very simply made, by a few long strokes of a knife or large blade, with no attempt at smoothing off the rough facets left by the whittling, and could have been made in minutes. Without seeing the object it is not possible to judge the degree of wear or polish, but the drawing shows fairly sharp facets, indicating that the object had not been handled or worn to any considerable extent.

The burial dates from the first half of the first millennium AD. Roughly made pins or points such this example are not culturally diagnostic and occur in all periods, although bone and antler pins are not a common feature of the early centuries AD. They become more common in the later Scottish Iron Age with the advent of the characteristic small, hipped pins in the sixth and seventh centuries.

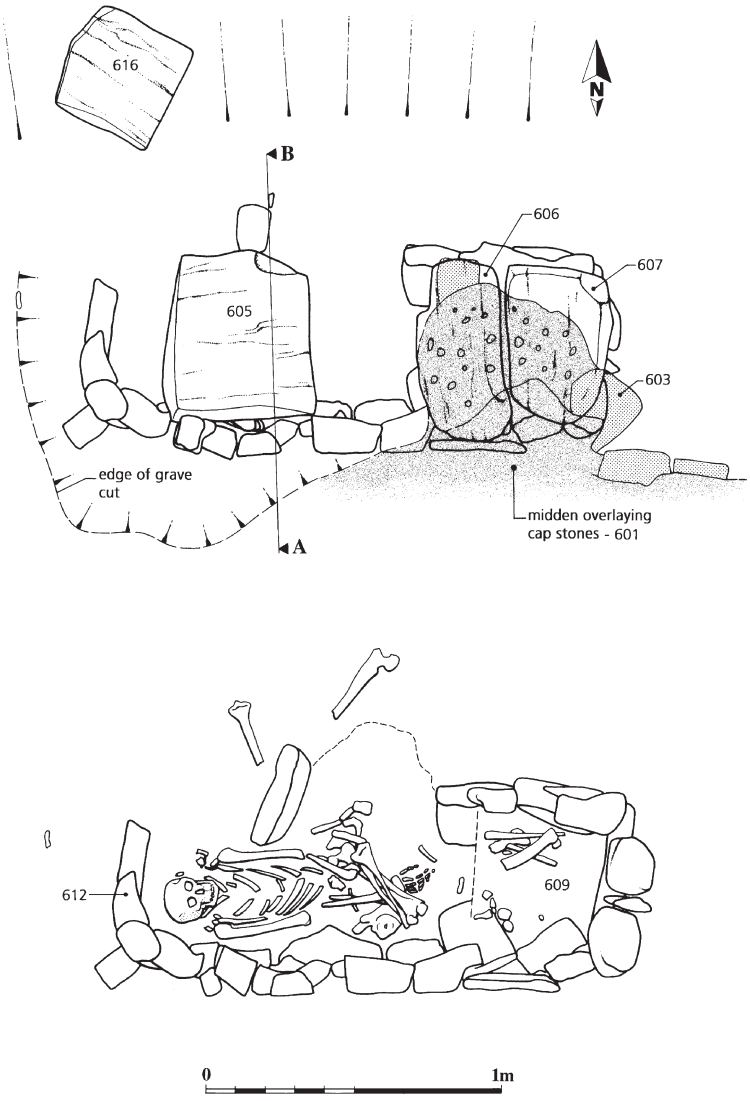
Single pins associated with later burials are generally assumed to be shroud pins (eg O'Sullivan 1994, 334). However, Gals 93 appeared to have been dressed and wearing some personal effects such as his iron brooch, and it is probable that the antler pin at the back of his head was a hairpin or similar accessory, which suggests that his hair was worn long: an impression borne out by literary and archaeological evidence.

Numerous classical sources refer to the hairstyles and fashions of the continental Celts in the last centuries BC and the first centuries AD. Diodorus Siculus (5, 28) referred to the practice of lime-washing the hair and pulling it back to resemble a horse's mane. Tacitus (Germania, 38) described how German men tied their hair in a knot on top of their heads: a man's body, dated to the first century AD, with his hair in such a knot was recovered from a bog, Osterby (see Brothwell 1986, 34, fig 21). Frequent reference to the length of hair worn by both sexes can be found in early Irish literature (Ross 1970, 40–5) and images of men with their hair in long, single plaits are found on Celtic coinage (Ross 1970; James 1993, 64). Many Class II and III Pictish symbol stones have carvings of men with long, elaborately styled hair (eg Brough of Birsay: see Foster 1996, 41, fig 19; Inchbrayock, Angus: Sutherland 1997, 70 and pl; Rhynie Man, Grampian: Shepherd & Shepherd 1978), suggesting that a preference for long hair persisted into the middle and later first millennium AD. The best British archaeological evidence comes from the 'gypsum burials' in the Romano-British cemetery at Poundbury, Dorset (Sparey Green *et al* 1982, 96–7; Farwell & Molleson 1993, 205–6), where a long plait was recovered from the burial of a young man, suggested by the excavators to have been 'an important native' (Sparey Green *et al* 1982, 100). The evidence supports the view of Ross (1970, 43) that 'as an ideal of Celtic beauty . . . hair was usually, but not always, fair, rich, thick and elaborately styled'. There is no reason to think that the inhabitants of Lewis at this time were any less vain than elsewhere in the Celtic-speaking world.

EXCAVATION OF A BURIAL IN 1996 (GALS 96)

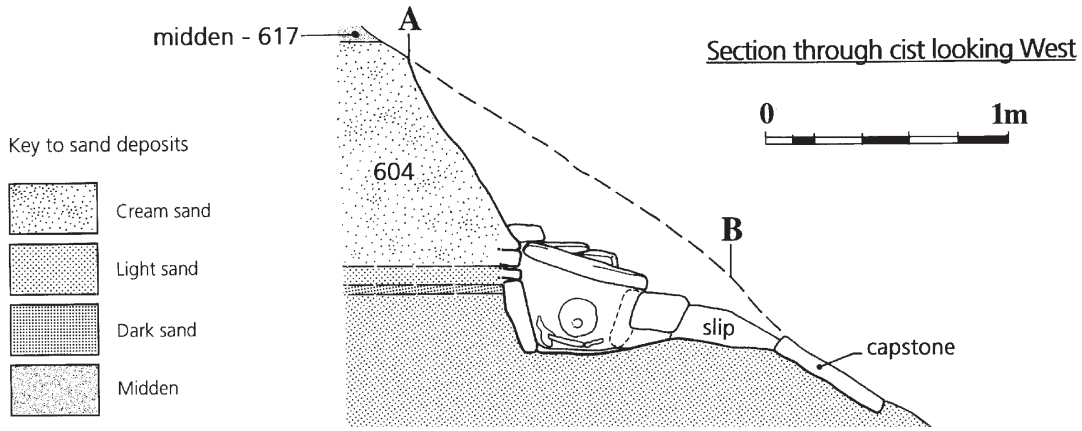
Tim Neighbour & Carol Knott

The burial was discovered on 9 March 1996 by a New Zealand couple, guests of Dr Rennie who lives nearby. Dr Rennie alerted Carol Knott, of the Lewis and Harris Archaeology Group, who in turn informed Noel Fojut of Historic Scotland.



ILLUS 5 (above and facing) Burial, Gals 96: plans and profile

The excavation was conducted in two phases. The cist had originally been sealed by five capstones. Those covering the head and the upper legs had become dislodged, exposing the bones underneath. Only one of these (616) survived on the erosion slope. Much of the north side of the cist had collapsed. These exposed sections were excavated by Carol Knott on 11 March 1996. More extensive excavation was subsequently undertaken by CFA in co-operation with Carol Knott on 11 and 12 April 1996. The remaining capstones (605–7), the sides of the cist (612) and the remaining bones were excavated. The illustration accompanying this text (illus 5) is combined from plans produced in both phases of the work.



The position of the cist, c 3 m up the sloping dune face, made excavation difficult. A ladder was placed up the slope and a working platform cut in the dune face. The excavation was conducted in unremitting rain and buffeting winds.

THE CIST

The grave was aligned roughly east/west, with the head at the west end, and measured 1.75 m (east/west) by 0.70 m (north/south). The sides of the cist (612) were constructed of upright stones laid against the sides of the grave cut. Two courses of smaller, flat laid stones were placed above these and the whole construction sealed with flat capstones (605–7 and 616), although only three of these (605–7) remained *in situ* (illus 5). The side of the cist appeared to be slightly corbelled where it survived to its full height at the south (illus 5, profile).

The grave cut was not visible above the level of the cist walls. No definite foundation layer to the grave was found, although it seems clear that the body would have rested on the base of the grave (615). The cist was filled with off-white shell sand (608–11) which had probably trickled in through the gaps between the capstones. Plant remains, which were recovered from samples of the material which filled the cist, are discussed below (see Church, below).

THE BURIAL

The skeleton of this inhumed male was extremely well preserved. Although the bones had been disturbed and the grave had slumped to the north, it was clear that the body had been buried in an extended position (illus 5). The knees were slightly raised and rested on the north side of the cist. No grave goods were found.

OTHER DEPOSITS

The capstones of the cist were sealed by a layer of off-white shell sand (604) 0.7 m thick, which in turn was sealed by a continuous dark brown band of midden (617), 0.25 m thick. This midden did not survive vertically above the grave, owing to the slope of the eroding dune face (illus 5). However, earlier reports on excavations at Galson (eg Ponting 1989) make it clear that this layer formed a continuous deposit above the long cist cemetery, and probably relates to later settlement

in the vicinity. Some of the midden (601 & 602) had slumped onto the eastern capstone of the cist (illus 5). This was recorded and sampled. Finds from the slumped midden included pottery, fish bones and shells.

TAPHONOMIC PROCESSES

Mike Church

Consideration of the sediment formation, and therefore the ecofact taphonomy, within the cist is complex. Three possible taphonomic pathways can be proposed: deliberate placing of material (as an offering) by humans; natural aeolian accretion and percolation through the capstones; and slumping of material from the overlying archaeological deposits. The deliberate placing of material seems unlikely as offerings would probably be positioned in a spatial configuration detectable on excavation and the resulting ecofact assemblage would presumably be more homogenous and coherent than observed. Therefore, the evidence points to the sediment accumulating largely by aeolian accretion and limited slumping of material from the archaeology above. This hypothesis is supported by sedimentary analysis, especially magnetic susceptibility values, which are slightly higher than those for the levels of machair wind blown sand, indicating the limited mixing of slumped midden material with natural aeolian accretion. The source for the aeolian transport of carbonized macrofossils could stem from archaeological deposits being eroded or from the addition of midden material to the machair surface, in an attempt to stabilize what is in effect a very unstable and dynamic system (cf historical data from Martin 1695). This redeposition of material is also suggested by the poor state of preservation of the carbonized plant macrofossils and the relatively high levels of indeterminate fruit/seeds.

Routine soil tests and ecofact taphonomy

Results The results of the soil tests can be seen in Table 1. This shows the clear differentiation between the chemical and physical properties of the two groups of samples from the cist and the overlying midden. The midden samples (601 & 602) have relatively high magnetic susceptibility and phosphate levels compared to the cist samples (608–11, 613, 615). There is also a slightly higher organic content as well as a slightly lower pH for the midden samples.

This differentiation between the midden and cist samples is important when addressing the taphonomy of the ecofacts within the individual samples. The midden itself was presumably formed by the discard of domestic rubbish from the settlement overlying the sand, which in turn overlies the cist. The high magnetic susceptibility and phosphate values are consistent with this hypothesis on comparison to the regional database, currently being assembled as part of doctoral research, and other excavated sites within machair zones, such as Dun Vulan (Parker-Pearson *et al* 1996). However, the organic content and the quantifiable component/litre ratio are generally higher in other middens in machair zones which suggests a certain amount of wind-blown sand has mixed with the midden material during the slumping and erosion process which revealed the cist.

Carbonized plant remains The plant macrofossil assemblage of 46 quantifiable components from the eight samples can be seen in Table 1. The assemblage is analysed as a single group as most of the macrofossils came from the overlying midden (see above). No charcoal of greater than 4.0 mm was recovered for identification. All plant identifications were checked against botanical literature and modern reference material from collections in the Department of Archaeology, University of Edinburgh. Nomenclature follows *Flora Europaea* (Royal Botanic Garden, Edinburgh, 1998) with ecological information taken from Clapham *et al* (1989), Stace (1991) and Pankhurst & Mullin (1994).

TABLE 1

Routine soil tests and plant remains

Sample details									
Context number			601	602	608	609	610	611	613	615
Sample volume (litres)			15	3	19	15	15	23	2	43
Routine soil tests										
Magnetic susceptibility (SI)			0.223	0.194	0.04	0.025	0.04	0.041	0.04	0.024
Organic content (%)			3	3.3	2.6	2.5	2.2	2.1	2.4	2
pH			7.67	7.61	7.78	7.9	7.98	8.15	8.13	8.06
Spot phosphate			High	High	Trace	Trace	Trace	Trace	Trace	Trace
Cultivated species	Plant part	Common name								
Hordeum										
H. sp	caryopsis	Barley indet		1		1				
H. hulled	caryopsis	Hulled barley	3		3		1	1		
H. cf hulled	caryopsis	cf Hulled barley	3							2
H. hulled asymmetric	caryopsis	Six-row hulled barley	1							
Cereal indeterminate	caryopsis		3		1					1
Cereal/monocotyledon	basal rachis					1				
Cereal/monocotyledon	culm node				1					
Cereal/monocotyledon	culm base		2	1	1					
Wild species										
Stellaria media (L) Vill	seed	Chickweed	2		3	1	2	3		
Polygonum sp	fruit	Knotweed	1							
Gramineae undiff	caryopsis	Grass undiff			1					
Indeterminate	fruit/seed			1	2	1	2			
Quantifiable components			15	3	12	4	5	4	0	3
Quantifiable component/litre			1.00	1.00	0.63	0.27	0.33	0.17	0.00	0.07

Species represented The only cultivated plant identified was that of hulled barley (*Hordeum* hulled), which was represented by a number of grains throughout both the midden and cist samples. One grain within Sample 1 displayed asymmetric dimensions, indicating the six-row species (*Hordeum vulgare* var. vulgare). The cereal/monocotyledon plant parts came from different points on the stem (the culm) and are more likely to belong to other monocotyledons rather than the cereals, due to their small size. Wild plants were poorly represented with the highest frequency belonging to chickweed (*Stellaria media* (1) Vill) with a few seeds of knotweed (*Polygonum* sp.) and other grasses (Poaceae undiff). All three are common on cultivated or disturbed ground but also appear in machair and some moorland zones in modern Lewis (Pankhurst & Mullin 1994). All taxa are common in prehistoric crop assemblages (Greig 1991).

Taphonomy It has been proposed (see Taphonomic Processes, above) that the plant macrofossils stem from the overlying settlement and middens above or through aeolian accretion. The existence of only cereal grains with no chaff suggests crop-processing was not responsible for the charring process (though this could be explained by preservational biases: cf Boardman & Jones 1990). Instead it seems likely that the cereal remains represent accidental charring in domestic hearths, during cooking. The small cereal/monocotyledon plant parts and wild plant seeds could also have been charred in these hearths as grass fuel or through the burning of turf (Dickson 1999). The contents of these hearths were subsequently cleared out and dumped on external middens or mixed with other domestic refuse and dumped on the machair as fertilizer.

HUMAN REMAINS

Margaret F Bruce & Neil W Kerr

The two Galson males (Gals 93 & Gals 96) have several features in common and also with a further Galson long cist male (Gals 89/2), described in Ponting (1989). All three had survived at least until the latter part of the fourth decade with Gals 93 and Gals 96 living well into the fifth decade. All three were of similar height and broadly similar head and limb shape (Tables 2–4). All shared a complex of trauma and/or degenerative pathology indicating a physically arduous existence. Gals 89/2 and Gals 93 both have unfused acromial processes at the shoulder perhaps associated with activities such as archery or rowing started in youth; Gals 93 and Gals 96 share degenerative complexes associated with the shoulder joint; the relatively younger Gals 89/2 may have died before degeneration became evident. All three show some degenerative processes in the spine, with Gals 89/2 and Gals 96 having Schmorl's nodes, considered to be due to compressive loading in youth; Gals 89/2 suffered spondylolysis of the fifth lumbar vertebra, a condition considered to be traumatic in origin and found in about 5% of the general modern population but in up to 50% of gymnasts, rowers and those who carry heavy loads on the back. Only in Gals 96 did joint degeneration proceed to eburnation (abnormal hardening) in the wrists and left knee joint, suggesting some differential behavioural component for this individual. Apart from the

TABLE 2

Skull: metric data (all measurements in mm)

	Gals 93	Gals 96
Maximum length	177	188
Maximum breadth	128	144
Minimum breadth	95	98
Basion bregma height	135	144
Nasion occipital length	173	125
Nasion basion	105	99
Nasion lambda	173	171
Nasion alveolare	76	70
Bizygomatic breadth	128	128
Bimaxillary breadth	90	59
Dacryon-dacryon	21	24
Orbital height, left	33.6	33.1
Orbital width, left	41.5	41.8
Orbital height, right	32.8	35.2
Orbital width, left	42.0	42.0
Nasal height	53.0	49.8
Nasal width	24.2	24.0
External palatal length	54.4	52.5
External palatal breadth	57.6	60.8
Foramen magnum length	38.0	40.4
Foramen magnum breadth	32.7	29.2
Cranial index	72 (dolicranic)	77 (average)
Cranial module	147	158
Length-height index	76 (average)	77 (high)
Breadth-height index	95 (average)	100 (high)
Fronto-parietal index	74 (broad)	68 (average)
Total facial index	91 (narrow)	94 (narrow)
Upper facial index	59 (narrow)	55 (narrow)
Orbital index, left	81 (wide)	79 (wide)
Orbital index, right	78 (wide)	84 (average)
Nasal index	46 (narrow)	48 (average)
Palatal index	94 (broad)	

TABLE 3

Limb dimensions (all measurements in mm)

	Gals 93		Gals 96	
	Left	Right	Left	Right
Clavicle length	151	–	151	144
Humerus length	301	314	320	322
head breadth	45.6	48.3	46.3	47.6
bicondylar width	–	–	63.4	63.4
Radius length	240	241	251	253
Ulna length	264	262	276	278
Symphisis-acetabular length	–	–	–	64.6
Acetabular breadth	–	51.0	53.0	51.8
Femoral length	440	434	439	437
head breadth	46.2	46.0	46.4	46.4
bicondylar width	77.4	80.0	79.6	–
maximum shaft diameter	34.4	33.4	30.4	30.7
subtrochanteric A.P. diameter	26.8	25.1	25.2	25.0
subtrochanteric M.L. diameter	33.5	32.0	34.0	34.6
Tibial anterior length	351	–	363	358
posterior length	352	–	362	357
position of nutrient foramen (NF)	118	–	120	119
head breadth	75.1	75.0	76.4	76.2
antero-posterior diameter (NF)	36.5	–	39.6	40.7
medio-lateral diameter (NF)	25.5	25.5	23.0	23.1
Fibular length	345	351	345	351
Calcaneal length	77	–	–	79.0
Brachial index	80	77	78	79
Crural index	80	–	83	82
Intermembral index	68	–	71	72
Meric index	80	78	74	72
Cnemic index	70	–	58	57

TABLE 4

Stature estimates

Gals 93: 168.9 $\pm$ 3.94 cms (5'6")
Gals 96: 168.9 $\pm$ 3.94 cms (5'6")

knee of this individual, degenerative change was generally more marked in the upper limb in all three men. Gals 89/2 showed evidence of a healed pelvic fracture; Gals 96 of healed rib, and possible vertebral spine fractures and of a small depressed fracture of the skull and perhaps also of an injury to the back of the skull.

Gals 93 and Gals 96 had powerful chewing muscles. All three had suffered dental abscesses and marked attrition. Gals 89/2 and Gals 93 both had crowded dentition, particularly the latter who certainly had the worst periodontal health. It appeared that none of them had shown much interest in oral hygiene.

All three had ossicles in skull sutures, probably a developmental trait perhaps with a genetic component. Gals 96 had a developmental anomaly in the sacrum which had six segments. A later Viking group from Cnip, Lewis (Dunwell *et al* 1996a) had a high frequency of vertebral developmental anomalies (two of four individuals with six-segment sacra, one with spondylolysis). Thus, for the combined Lewis Group of four Cnip and three Galson individuals (Gals 89/2 male, Gals 89/1 female, Gals 96, Gals 93 sacrum missing), an unusually high level of vertebral defects is present — five out of seven individuals with either spondylolysis or a six segment sacrum.

A full report on the human remains is lodged with NMRS (Bruce & Kerr 1997).

RADIOCARBON DATES

Tim Neighbour

Marine shell samples from around the UK coastline have an apparent age 405 ± 40 years older than their true age (Harkness 1983). Thus, the proximity of the cemetery to the sea suggested that a cautious approach to the radiocarbon dates was required and that particular attention should be paid to the possibility that the marine reservoir effect, due to a diet rich in marine resources, had made the dates appear too old. Measurements of $\delta^{13}C$ and $\delta^{15}N$ from bones provide information about the proportion of seafood and animal protein in the diet over the last ten years of the individual's life. In addition to providing a correction for the radiocarbon ages, these measurements also supply important information about lifestyle (Johansen *et al* 1986; Richards & Mellars 1997).

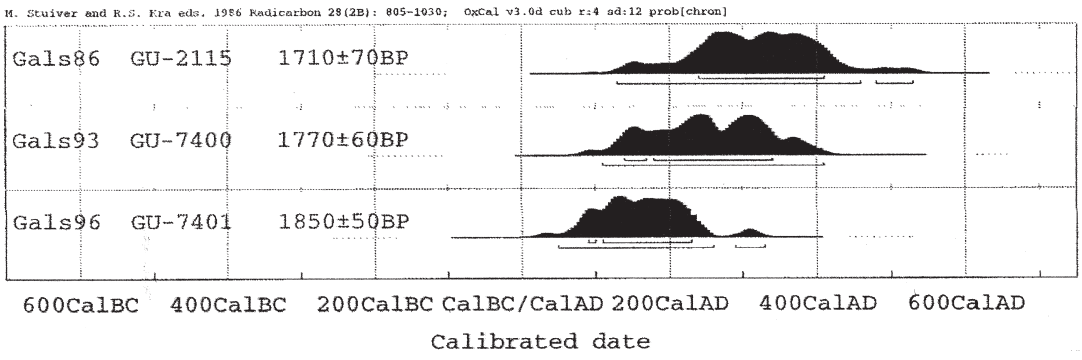
The $\delta^{13}C$ and $\delta^{15}N$ measurements for Gals 93 and Gals 96 (Table 5) were performed by Michael Richards at Oxford and suggest that no calibration due to the marine reservoir effect is necessary for the dates derived from the skeletons. It is also suggested that these people enjoyed a diet very high in animal protein with almost no seafood, which is interesting for a coastal population.

It is apparent that Gals 96 is earlier than both Gals 93 and Gals 89/2, which are broadly contemporary (Table 5 & illus 6). The three radiocarbon dates indicate that the cemetery was in use during the first half of the first millennium AD, with origins in the second century (or perhaps even the late first century) AD. This fits fairly happily with that for long cist cemeteries elsewhere in Scotland. Galson has the advantage of being a deeply stratified site, with the remains of settlement over the cemetery and deposits beneath. Thus, it should in due course be possible to retrieve dating samples from both beneath and above the level of the cemetery and hence tighten the date range by the application of Bayesian statistics (Buck *et al* 1996): this is particularly

TABLE 5

Radiocarbon dates: all dates calibrated using OxCal 3beta2, 1998 (Stuiver & Kra 1986)

Lab No.	Burial	BP	1σ cal date range (68% prob)	2σ cal date range (95% prob)	$\delta^{13}C$ (‰)	$\delta^{15}N$ (‰)
GU-7400	Gals 93	1770 ± 60	145 — 338 AD	110 — 410 AD	–19.78	10.77
GU-7401	Gals 96	1850 ± 50	87 — 228 AD	60 — 316 AD	–19.84	10.03
GU-2115	Gals 89/2	1710 ± 70	240 — 410 AD	130 — 530 AD	unknown	unknown



ILLUS 6 Radiocarbon dates for Galson

necessary as an approach to radiocarbon dates for Early Historic sites, where the calibration curve gives broad confidence limits.

DISCUSSION

Tim Neighbour

LONG CISTS: DISTRIBUTION, DATE AND SIGNIFICANCE

Long cists are the most common burial form recorded to date in Early Historic Scotland. They occur singly (eg Sandside, Orkney: Hedges 1978), in vast cemeteries of several hundred graves (eg Hallow Hill: Proudfoot 1996) and beneath square- and round-barrows, which frequently occur in small groups (Close-Brooks 1984, 91; Ashmore 1980; Ashmore & Maxwell 1996).

The morphology of the concentration of long cists at Galson (illus 7) has more in common with long cist cemeteries than with square- and round-barrows. No overlying cairns or surrounding ditches have been discovered associated with any of the recently excavated burials (Ponting 1989; this report). No trace of associated features can be seen on the photographs which accompany the report on Stevenson's (1952) excavation: such features would have been preserved beneath the layers of sand above the cemetery. Furthermore, the burials are more densely arranged and the quantity of burials is greater than within barrow cemeteries. Thus, despite the recent discovery of square-cairn burials in the Western Isles (Aird Ma-Ruibhe, North Uist: Downes & Badcock 1999b; Cille Pheader, South Uist: Brennand *et al* 1999) it is felt that they have no bearing on a consideration of the cemetery at Galson.

Isolated long cists have been discovered throughout Scotland. Henshall (1956) defined a cemetery as being more than six graves. Following this definition, the densest distribution of these sites is south of the Forth in the Lothians, the north Borders, on the south and east coasts of Fife and in Angus. Cemeteries have been discovered in North Aberdeenshire, Caithness and Orkney, and a scattering of long cist cemeteries have been recorded on the west coast of Scotland from Skye in the north to the Mull of Galloway in the south (Alcock 1992, 125; Duncan 1996, 330; Proudfoot 1997, illus 27, 445 provides the most recent distribution map). Long cist cemeteries have long been considered to range in date from fifth to ninth centuries AD (Henshall 1956; Close-Brooks 1984). More recently the date range has been given as third century AD onwards (Alcock 1992), whilst recent excavations at Thornybank long cist cemetery, near Dalkeith (Rees 1998) have perhaps extended this date range back to the second century AD (A Rees, pers comm).

Long cist cemeteries are often seen to reflect the change to Christianity (see eg Alcock 1992; Close-Brooks 1984; Proudfoot 1996; Thomas 1980, 275–94). The evidence for this largely hinges on the predominantly east/west orientation of the burials; the absence of grave goods; and the association of cemeteries with Christian monuments in one or two cases, such as the Catstane (Cowie 1978). Thomas (1980, 275–94) suggests that long cist cemeteries are a disruption of pre-Christian burial rites associated with Ninian's (c AD 360–432) conversion of the southern Picts. This view is supported by Proudfoot (1996, 447) who suggests that 'the excavated long cist cemeteries all indicate origins in pre-Christian or late prehistoric times', with pre-Christian graves often providing a focus for later, more orderly lines of long cists. Changes in use of long cist cemeteries and in burial form, occurring broadly in the eighth century, could perhaps be due to Columban and Anglian influence (ibid).

However, some pre-Christian Picts were also buried without grave goods and no chapels or churches have been discovered in long cist cemeteries, except where the main cemetery is eighth or ninth century (Alcock 1992). Furthermore, the association of the Catstane with the adjacent

long cist cemetery is not clear cut. The rows of long cists lie to the east of that stone, while other graves are more irregularly arranged around the stone (ibid). In addition, although the Catstane is clearly a Christian symbol, it may have been erected by descendants of pagans buried in the long cist cemetery. The increasingly early dates from long cists, cited above, suggest that pre-Christian origins for this burial form in Scotland must be considered likely. Of course, this does not preclude the floruit of long cist cemeteries being a Christian, and probably Ninianic, phenomenon, but very early burials, such as the three dated burials at Galson, must be treated with caution.

THE CEMETERY AT GALSON

The cists excavated in 1993 and 1996 bring the total number of burials recorded at Galson to 14. The key features of the recorded burials are summarized in Table 6. With one exception, the burials were all in long cists and unaccompanied by grave goods. The exception, Gals 93, was in a dug grave and had an accessory vessel, bone pin and jewellery. The most common recorded burial position is extended and supine, although if some of the earlier sources are to be believed (R S Doig, pers comm in Stevenson 1952), some of the bodies were buried in rather odd positions. It is unfortunate that the more unusual positions, such as Gals I (ibid), face down with hands around neck, are unsupported by anything stronger than anecdotal evidence. Nevertheless, face down burials are known from cemeteries in Roman Britain of a similar date to the Galson graves: 'it is conceivable that [face down burial] was sometimes accidental, but its frequency suggests a deliberate rite, the meaning of which is by no means clear. If there was a literal belief in rising from the dead those buried in this way may have been people whom the community didn't want to return — social outcast, criminals or other undesirables' (Millett 1995, 127).

TABLE 6

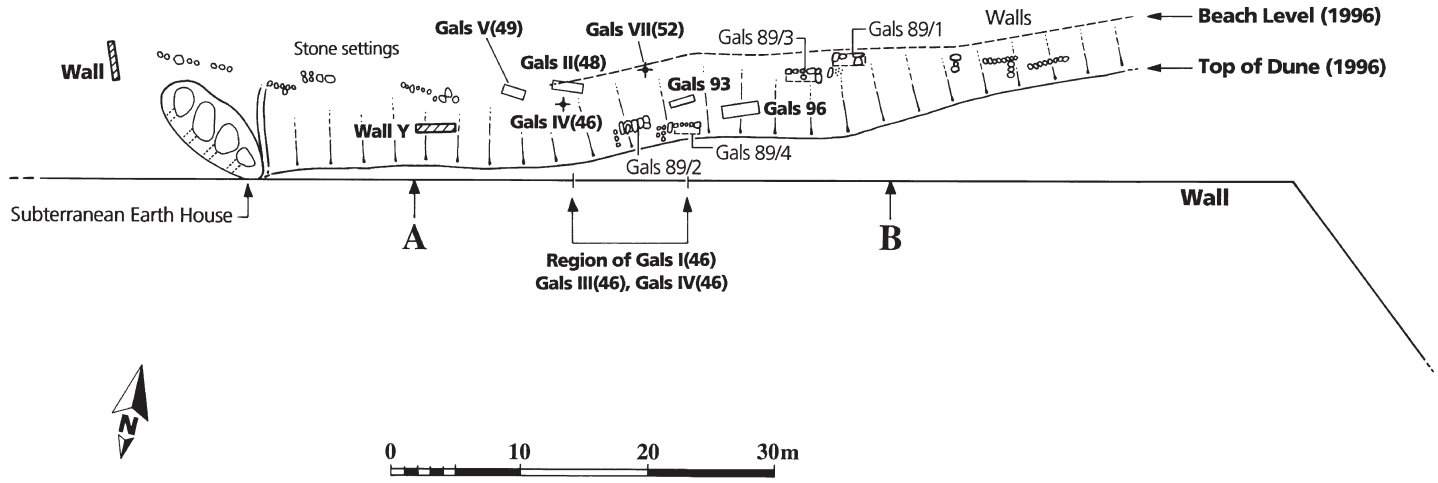
Key information on the recorded burials

ID and year	Grave	Burial	Sex and age	Grave goods
Gals I(46)	Long cist	Face down, with hands about neck	middle aged female	none
Gals II(48)	Long cist	extended, lying on right side	adult female	none
Gals III(46)	Long cist	?extended	adult male	none
Gals IV(46)	Long cist	?extended	young adult female	none
Gals V(49)	Long cist	extended, supine	middle aged female	none
Gals VI(52)	Long cist	extended	unknown	none
Gals VII(52)	Long cist	?extended (only legs survived)	unknown	none
Gals 69	Long cist	unknown	child	none
Gals 89/1	Long cist	extended, supine	adult female, mid-20s	none
Gals 89/2	Long cist	extended, almost supine	adult male, 35–40	flattened stone, with rubbed faces
Gals 89/3	Long cist	unexcavated	unknown	unknown
Gals 89/4	Long cist	unexcavated	unknown	unknown
Gals 93	Dug grave	extended, lying on right side	male	pot, bone pin, iron brooch
Gals 96	Long cist	extended, supine	male	none

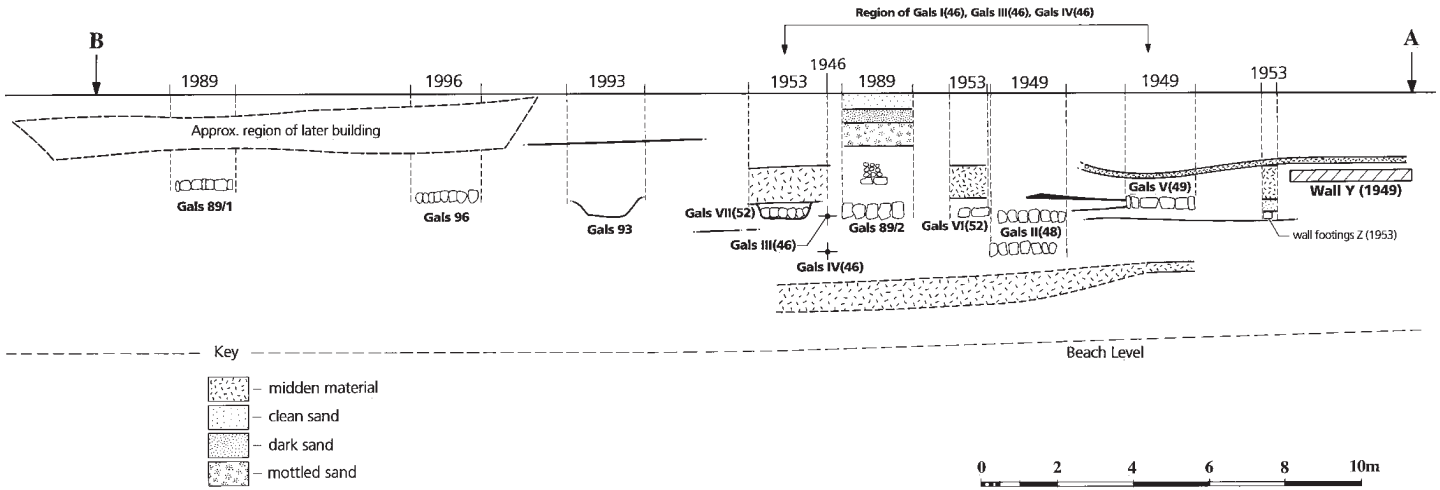
Sources: Gals I to VII: Stevenson 1953; Gals 69: NMRS 1969; Gals 89/1 to 89/4: Ponting & Bruce 1989.

LAYOUT OF THE CEMETERY

This cemetery has been known since the discovery of the first burials in 1946 by Dr R S Doig (Stevenson 1952). The burials have been excavated at various intervals since that time, as they



ILLUS 7 Combined plan of all reported burials at Galson (*based on Ponting 1989*)



ILLUS 8 Idealized 'section' through Galson cemetery

have become exposed in the erosion face. The lack of a concerted strategy to deal with this site has led to variable levels of recording and reporting. Indeed it appears that two burials were noticed, but never actually excavated (Ponting 1989), presumably because they were unthreatened at the time: their fate is unknown. It is entirely likely that other burials have disappeared without being noticed. Furthermore, the piecemeal nature of the excavations, coupled with changes in surveying practice and consequent levels of detail achieved, means that it is very difficult to put together a precise overview of the cemetery.

Nevertheless, using the information provided by Stevenson (1952), the NMRS and Ponting (Ponting 1989) a rough plan of the burials can be produced (illus 7). Stevenson (1952) provides two photographs and a set of measurements, to the nearest foot, written in prose, however, which often seems ambiguous. Ponting is the first to provide us with a plan of any of the burials discovered at Galson, and her composite, which includes earlier features, inevitably forms the basis from which this evaluation of the layout of the cemetery is developed.

The positions of Gals 93 and Gals 96 were surveyed using an EDM, with data logged on a portable computer running PenMap, and tied in to the known field corners. Fortunately, the position of one of Ponting's cists, Gals 89/1, was still apparent within the erosion face, and thus her plan could be tied in with the present survey. The positions of Gals 89/2 to Gals 89/4 are taken directly from Ponting's plan. The positions of Gals VI and Gals VII were calculated from the quoted measurements in Stevenson (1952). The slight, but noticeable discrepancy between the present plan and Ponting is most probably due to a different approximation for the conversion of imperial to metric (we have used 1 ft: 0.3048 m). The positions of Gals II and Gals V have been estimated from examination of the photographs in Stevenson (ibid). The positions of Gals I, Gals III and Gals IV are known only as east/west figures. Keith Blood of the Ordnance Survey surveyed the position of a small cist in 1969, containing the body of a baby (NMRS ref NB 45 NW 2), but no record of this could be found. However, this cist seems to have been in the same area as those recorded by Stevenson (ibid). It was destroyed, with its contents, by children.

Stevenson (ibid) also furnishes information about the relative depths of the cists and various other features. Not all of the relevant information is provided, so that heights of walls and cist slabs are often missing and some statements leave considerable uncertainties. Despite these shortcomings, it proved possible to construct an idealized elevation of the cemetery and settlement (illus 8) which could be combined with the better recorded later burials (Ponting 1989; this report). A number of stylistic conventions have been adopted in this illustration. Firstly, it is a north-facing elevation designed to provide depth information. Thus, burials which are clearly several metres apart in plan in a north/south direction are presented on the same elevation and, inevitably, some overlap occurs. Secondly, the top of the erosion face is assumed to be level and to have had the same height at all distances from the wall. This is not an unreasonable assumption to judge from some of the early photographs. The depth of Gals IV is odd and may be the result of misinterpreting the measurements given by Stevenson. His text is particularly ambiguous in the case of Gals II. Consequently, alternative positions for this burial have been presented. We consider the upper position to be the more likely. Finally, the positions of two known burials remain completely unfixed. Gals I has no height assigned to it. Gals 69 is not fixed in terms of its plan position, but is known to be '0.7m below the level of the midden', from NMRS records. If this is assumed to mean the 'upper midden', this places it at the same level as the majority of the burials.

The common level of the burials in the section is interesting (illus 8). It suggests that all the gravepits were quite shallow. If the cemetery had been used over some time and the graves had been cut from much higher up, as sandy deposits accumulated, a greater variation in the level of

the graves could be expected. It therefore seems likely that the layer of sand over the cists formed after the cemetery was abandoned, rather than being the layer through which the graves were dug.

The cemetery has been dated to the first half of the first millennium AD. Although this date range fits fairly happily with that for long cist cemeteries elsewhere in Scotland, it is worthy of mention that this long cist cemetery is currently unique in the Western Isles, if two vaguely recorded cemeteries recorded on North Uist at Baleshare (Wedderspoon 1912) and Teanamachar, Illeray (NMRS ref NF 76 SE 33), now lost, are discounted. Recent excavations at An Corran, Boreray, an uninhabited island off North Uist (Downes & Badcock 1999a; this volume) have revealed three cists. Two of the cists were excavated from the eroding sand cliff: a short cist with a contracted inhumation; and a long cist containing a flexed inhumation (ibid). The circumstances of the discovery of this site closely resemble that for Galson and it is possible that further cists await discovery at An Corran. This discovery begins to make the long cist cemetery at Galson look less isolated.

It is apparent that there was an element of design in the layout of the cemetery at Galson. With one exception (Gals IV, but see reservations expressed above) the burials all appear to have been at the same level. They are all aligned roughly east/west, and with the exceptions of Gals I and Gals 93, the inhumations appear to have been extended and supine (or almost supine) with no grave goods. The layout of the cemetery is not as neat, nor quite as dense, as many of the cemeteries recorded elsewhere (eg Hallow Hill: Proudfoot 1996), and it is probable both that it is not yet fully exposed and that a number of graves have eroded without record. Nevertheless, it is possible to put forward some thoughts on the layout.

Firstly, it is obvious that the size of a cemetery reflects the size of the community which is burying its dead there: it is unsurprising that the cemetery at Galson, located in the marginal lands of the Western Isles (Armit 1999), is not as large as the cemeteries discovered in the fertile lands of Fife and Angus.

Proudfoot (1996) posits a history of development of the cemetery at Hallow Hill. She suggests that the cemetery occupied the same site as an earlier pagan burial ground and that the long cists clustered around three older graves of a different morphology, which were possibly topped by more elaborate superstructures. Furthermore, she suggests that the graves were very likely to be clustered in family groups. This hypothesis, while uncontroversial, is unprovable without DNA analysis (ibid). However, non-metric bone characteristics may offer some hints. Three males at Galson (Gals 89/2, Gals 93 and Gals 96) have ossicles in the skull sutures, a harmless developmental trait with a genetic component, and they also share a similar skull and limb shape (see Bruce & Kerr, this report). This strongly suggests that they were related, although the radiocarbon date ranges are not tight enough to suggest whether they were related over a single generation (eg brothers) or over more than one generation (eg father and son; grandfather and grandson etc). In addition, these three burials were clustered (illus 7), suggesting a family plot. The fact that an individual buried with grave goods (Gals 93) in an unlined grave was possibly related to two in long cists (Gals 96 & Gals 89/2) is interesting. It is tempting to speculate that Gals 93 was buried according to a pagan rite while his two relatives in long cists (Gals 96 & Gals 89/2) were Christian. This would add a twist to the development of cemeteries suggested by Proudfoot as summarized above: Christian burials focused on the near contemporary burials of their pagan relatives. However, the radiocarbon dates do not support this: Gals 96 (a long cist burial) is earlier than Gals 93 (unlined burial with grave goods). Also, we must be wary of equating the presence of grave goods with 'paganism'. This assumption is still common, stemming from the belief that 'grave goods . . . indicate a particularly pagan view of the afterlife' (Halsall

1997, 62). Samson (1999, 120) warns us about the phrase 'grave goods', reminding us that in many situations they are in fact the undecayed remains of clothing and accessories. While these items reflect changing fashions, such items as the bone or antler ?hairpin (see Smith & Neighbour, above) and brooch found with Gals 93 tell us nothing of religious beliefs. The presence of a pot within a grave is more worthy of the status of 'grave good', but again we must be wary of using this as an indicator of a pre-Christian burial rite. As Halsall (1997, 62) has pointed out, the burial of grave goods was never banned by the Church and indeed 'very lavishly furnished Christian graves in churches [are known]'. Furthermore, the radiocarbon dates suggest that if the cemetery at Galson is wholly Christian, it must be amongst the earliest Christian sites in the Western Isles, and in fact possibly Britain, and perhaps the blurring of pagan and Christian rites should be expected.

CONCLUSIONS

If the appearance of long cist cemeteries is seen as reflecting the change to Christianity, then the presence of this cemetery within the Western Isles may demonstrate a very early contact with that religion. Thomas (1980, 275–94) has seen the phenomenon of long cist cemeteries as an aspect of St Ninian's conversion of the southern Picts. Perhaps the cemetery at Galson should be seen as part of this same phenomenon: two of the three radiocarbon-dated burials (Gals 93 & Gals 89/2) overlap with historical dates for Ninian (c AD 360–432) at the 95% confidence interval. It is not suggested that Ninian was ever in the Western Isles, but the inhabitants of this part of the world did not live in a vacuum. The importance of the western seaways of Britain as conduits of artefacts and ideas has been stressed at least since the publication of Bowen's *Britain and the Western Seaways* (1972) and has recently been summarized, with particular reference to Argyll in the first millennium AD, by Campbell (1999).

The above argument relies heavily on one interpretation of the radiocarbon dates from the three dated burials. An alternative view can be presented. The earliest dated long cist at Galson (Gals 96) is markedly earlier than the other two burials and suggests pre-Christian origins for the cemetery. The later two burials (Gals 93 & Gals 89/2) both have very wide spreads at the 95% confidence intervals and could easily be of third or early fourth century AD date, and hence probably pre-Christian.

Until the presence of further long cist cemeteries is attested in the Western Isles, the cemetery at Galson remains unique. While it could be tempting to view it as the burial ground of an isolated, Early Christian community at the Pictish periphery, the dates are at present too imprecise to either firmly support or categorically refute such a view. It is hoped that proposed further work, outlined below, will enable the precision of the dates from the cemetery to be increased.

SUMMARY OF WORK SINCE 1996 AND FUTURE DIRECTIONS

Tim Neighbour

Since the excavation of the long cist in 1996, the site at Galson has been the focus of multidisciplinary research. This work included a ground penetrating radar survey (Glendinning *et al* forthcoming) and a programme of recording, sampling and analysis of deposits associated with two of the structures within the erosion face over the cemetery (Church 1998; Peters *et al* 2000). A programme to monitor the erosion face has been set up (Neighbour & Church 2000).

The skeletons of some of the burials excavated by Stevenson have been relocated and analysed by Margaret Bruce and will be radiocarbon dated. Plant macrofossils from samples taken from the erosion face will be radiocarbon dated and a series of stacked dates and Bayesian statistics (Buck *et al* 1996) used to increase the precision of the dates derived for the long cist burials. This work will have important implications for the interpretation of the cemetery, in particular with reference to its (pre-) Christian status (Neighbour forthcoming). The dietary information gained by $\delta^{13}C$ and $\delta^{15}N$ analysis of the two burials at Galson has been contrasted with that gained from a Bronze Age cist (Dunwell *et al* 1996b) and a Norse cemetery at Cnip (Dunwell *et al* 1996a) on Lewis (Neighbour & Montgomery, forthcoming). A developmental technique, based on looking at combined Pb-, Sr- and O- isotopes present in teeth has been applied to the Galson burials as part of Janet Montgomery's doctoral research at the Department of Archaeological Science at Bradford University.

ARCHIVE AND FINDS ALLOCATION

Skeletal material from Gals 93 and Gals 96 is lodged with Museum nan Eilean, Stornoway. The project archive, comprising all CFA record sheets, plans and archive report (Neighbour & Knott 1997), will be deposited with the National Monuments Record of Scotland (NMRS). The artefacts recovered from the excavations were claimed as Treasure Trove and subsequently allocated to Museum nan Eilean, Stornoway.

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