

Papar place-names in the Northern and Western Isles of Scotland: a preliminary assessment of their association with agricultural land potential.

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Introduction

The twenty-eight *papar* place names (Old Norse: 'priest' or 'monk') of the Northern and Western Isles, thought to have been given by Viking and Norse settlers because of association with Celtic priests, have emerged as an important body of evidence from which to consider early ecclesiastical activity across the north Atlantic region. Attempts to understand the cultural and geographical contexts of these place names has, however, resulted in a diversity of opinion that includes eremitic, evangelical and retrospective place name interpretations.

Suggestions that most of these place names are located on islands and in marginal areas has been used to support an eremitic interpretation of the *papar* in the Northern and Western Isles (MacDonald, 1977). Such an interpretation is also suggested by archaeological evidence identifying early monastic settlements on isolated stacks of the Northern Isles (Brady et al., 2000; Brady 2002; Lamb 1974) and by early Irish documentary sources. These indicate the specialised use of the term *papar* to mean hermit, a view emphasised by the Irish scholar Dicuil writing in the 820s AD who noted solitude seeking *papar* in what was most likely to have been Iceland and Faeroe (MacDonald, 2002; Dumville, 2002; Tierney, 1967). Their subsequent, possibly hurried, departure on the arrival of Viking settlers, leaving no archaeological or palaeo-environmental trace in Iceland (Buckland et al., 1995; Vésteinsson, 2000; *Íslendingabók, Landnámabók*) and contested palynological evidence of cereal cultivation in Faeroe (Jóhansen, 1978; Hannon et al., 2001; Arge, 1991), further reinforces eremitic and ephemeral perceptions.

It has, however, been pointed out that at least some of the *papar* place names are located in areas of high quality agricultural land which had long been occupied prior to the arrival of the *papar* or the Norse (Lamb, 1974; Rendall, 2002). This has led to the suggestion that the *papar* may have been an evangelical group, possibly originating from Iona, and working and living amongst the local population in their missionary areas of settlement (Radford, 1983). In doing so, it has also been suggested they may have introduced new, improved, techniques of agricultural land management, including arable land manuring strategies giving rise to anthropogenic raised soils (Barber, 1981; Simpson and Gutmann, 2002). Further support for this hypothesis is suggested by evidence of a distinct increase in agricultural activity around the sixth century AD in western Ireland (Mitchell and Ryan, 1997; O'Connell et al., 1988; Moloy and O'Connell, 1991; 1993), the Hebrides (Fossitt, 1996) and Shetland (Bennett et al., 1992). However, convincing and

unequivocal evidence of agricultural improvement associated with the *papar* is yet to be presented.

Both eremitic and evangelical interpretations of the *papar* place-name evidence assume that they were given at or shortly after Viking and Norse settlement of the Northern and Western Isles to a resident *papar* population. Some authorities have found this an unlikely scenario, given the disruption that Viking activity brought to ecclesiastical settlement, and have postulated an alternative, radical, view that these place names were applied retrospectively sometime after Norse conversion to Christianity. Such naming may have taken place early after Norse conversion in the second half of the ninth century and the tenth (MacDonald, 2002), or may have been as late as the twelfth century, with the Church of this time seeking to relate itself to an older Christian tradition (Lowe, 2002). However, recent onomastic and linguistic perspectives on the *papar* names have led to a reassertion of an early naming by incoming Vikings and Norse due to the actual presence of *papar* (Gammeltoft, 2004).

It is evident that there is considerable debate over the meaning and significance of the *papar* place names based on different approaches, but as yet there has been no comparative analyses of the places associated with these names. By undertaking such analyses, deeper understanding of why such areas were given *papar* place names together with their cultural significance may emerge. This paper focuses on soils and agricultural land qualities associated with the localities of the twenty-eight *papar* place names in the Northern and Western Isles and in Caithness, by undertaking a desk-based assessment of arable land potential. If the *papar* were practical agriculturalists, as well as spiritual leaders, then we might expect to find *papar* place name elements associated with areas of land that were suitable for agricultural, including arable, activity; conversely eremitic *papar* would not have had such requirements. Further refinements of this hypothesis may also be possible by considering whether differences in land suitabilities for agriculture are evident between types of *papar* place names evident in the Northern and Western Isles and in Caithness, or between the different island groups. This desk-based exercise is followed by a preliminary field investigation that sets out to identify areas of agriculturally-improved soils, and the occurrence of anthropogenic raised soils in particular, associated with *papar* place name locations. The two areas selected for this field-based consideration are Pabbay (Harris) and Paible - Taransay, (Harris), both in the Western Isles. In undertaking this desk-based survey and by making preliminary field observations, new insights may be gained into the role and contribution of the enigmatic *papar* to north Atlantic cultural landscape history.

Data-bases for agricultural land assessment

Documented sources

Based on MacDonald (1977; 2002) twenty-eight *papar* place name localities, often with supplementary *papar* names, in the Northern and Western Isles and in Caithness were identified and mapped (Figure 1) Subdivision of *papar* place names was undertaken on etymological grounds giving four types as follows:

- *Papil, Paible, Bayble* - (Old Norse: settlement of *papar*; from *papar-býli*);
- *Papay* - (Old Norse: island of *papar*, Orkney and Shetland);
- *Pabbay* - (Old Norse: island of *papar*, Western Isles);
- *Papar* names with a topographical element, eg. Papdale, Papigeo, Papanish

A qualitative data-base for *papar* place name localities was developed from published and unpublished sources. Place name localities were defined as whole islands or as parishes for the collection of data. Information was collected as part of the *The Papar Project* and is reported as *Reports on the Sites Associated with the Papar* (this web site for the Northern Isles and Caithness, and forthcoming for the Western Isles) and included -

- Place names and marine feature names;
- Historical (including early maps) and archaeological indicators of ecclesiastical activity, including early chapel sites;
- Historical (including early maps) and archaeological indicators of cultivation practice.
- Soil survey information derived from the Macaulay Institute for Soil Research 1:250,000 and 1:50,000 sheets for Orkney, 1:250,000 and 1:63,360 sheets for north-east Caithness, and 1:250,000 sheets for Shetland and the Outer Hebrides (Soil Survey of Scotland, 1982a; 1982b; 1979; 1970). This data included soil series (at 1:50,000 and 1:63,360 scales), soil associations, component soils, topography and land capability for agriculture. Where the location of an early chapel site was known from the archaeological and historical review, note was made of the topography, soils and land capability class on which it was located.

Assessment of early agricultural land quality from soil evidence is grounded on the observation that early arable agriculturists in cool temperate north European environments had preferences for moderately light-textured, well-drained, fertile soils rather than heavy textured, poorly drained and peaty soils. In Soil Survey of Scotland terminology this means:

- First preference for brown forest soils and machair brown calcareous soils (although with possible erosion limitations); Table 1, preference category 1. These soil types would give maximum flexibility allowing both arable and livestock based activities.
- Second preference for podzols, humus-iron podzols (nutrient limitations); Table 1, preference category 2. These soil types would allow both arable and livestock based agricultural activities, but with less flexibility and requiring management of manures to maintain fertility of arable systems.
- Third preference for gley soils (wetness limitations); Table 1, preference category 3. These soil types would allow both arable and livestock based agricultural activities, but with less workability and requiring a degree of drainage to maintain arable activity.
- Fourth preference for peaty gleys (major wetness limitations) and peats (major wetness limitations); Table 1, preference category 4. These soil types would have supported limited agricultural activity, restricted to domestic livestock grazing.

The identified preferences are based on early agricultural requirements, rather those of the present day that have advantages of extensive drainage systems, inorganic fertiliser and mechanisation. For this reason, while modern land use capability maps have been used to guide understanding of early land preferences they cannot be regarded as a definitive assessment of early agriculture land requirements.

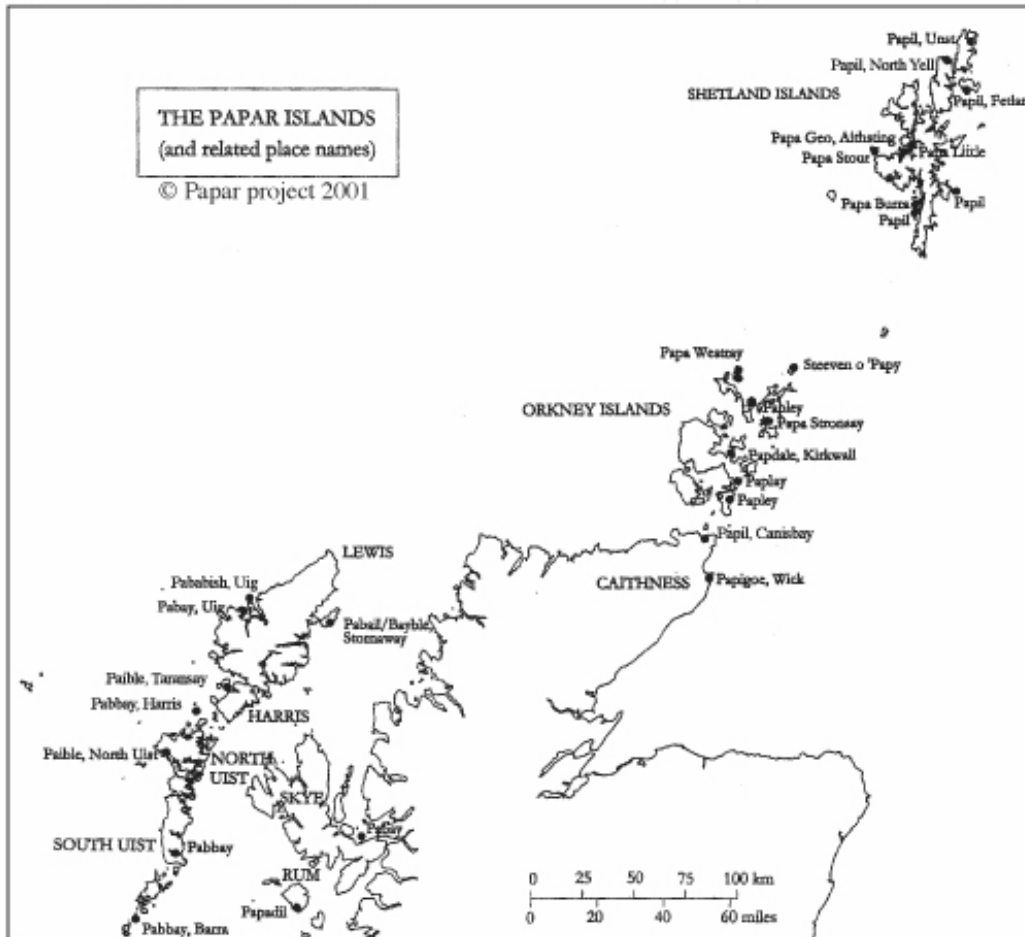


Figure 1: The *Papar* islands, and related place names.

To provide a greater security of historic interpretation for the soils-based agricultural assessment, the historic and archaeological survey of cultivation practice indicators was reviewed to assess the feasibility and practice of early agricultural activity in the place name localities. It must be emphasised that the data used in this analysis have a number of limitations. It is entirely likely that the *papar* occupied more localities than those that carry their name – there are islands in the Hebrides where early monastic communities are known to have existed, such as Eigg. Furthermore, use of the 1:250,000 scale soil maps is limited by soil mapping units comprising component soils rather than individual soil series. More precision in soil classification is needed to examine the relationship between soils and *papar* localities in greater detail, and although Orkney and Caithness is mapped as soil series at 1:50,000 and 1:63,360 scales respectively, this scale of soils mapping is not available for the Western Isles or for Shetland. Similarly, the archaeological and historical data base of evidence for agricultural practices is derived from desk-based review, and where evidence of cultivation practice is found it does not necessarily relate directly to the activities of the *papar*, only indicating that agriculture was feasible and practiced in the locality.

Preliminary soil survey

To give some support to the desk-surveys, preliminary field survey of soils by hand auger was systematically undertaken in two *papar* place name localities - on Pabbay and Taransay in the Western Isles (Figure 1). On Pabbay, the occurrence of two chapel sites, Teampull Moluag and Teampull Mhoire with a graveyard and early Christian sculpture at Bailenacille implies a community and ecclesiastical farm and so soil survey focused on this

area. On Taransay two chapel sites with possible Celtic personal names, St Keith's and St Taran's and associated graveyards are located at Paible, which from its name was associated by Norse with the *papar* – again soil survey focussed in this area. At each of the localities a free soil survey approach was adopted and soils described in the field using conventional soil science terminology (Munsell colour, texture).

Results and Discussion

Desk-based survey

Table 1 provides a summary of relationships between *papar* place names, soils and archaeological and historical evidence of cultivation practices across the Northern and Western Isles, and Caithness. Of the twenty-eight *papar* place name localities, seven (25%) are associated with first preference soils for agriculture, with five of this group also having associated archaeological or historical evidence of arable cultivation in the area. Seven *papar* place name localities (25%) are associated with second preference soils for agriculture, all of which also have archaeological or historical evidence of arable cultivation practice. Similarly seven *papar* place name localities (25%) are associated with third preference soils for agriculture, again all of which have supporting archaeological or historical evidence of arable cultivation. There are five localities associated with fourth preference sites (18%), with historical evidence indicating these areas are dominantly pastoral. Two localities (7%) are clearly associated with a stack or rock site and are not considered to be associated with agricultural activity.

Consideration of the different types of *papar* place names (Table 2a) indicates a clustering of the twelve *Papil / Paible / Bayble* place name localities (settlement names) locations associated with second and third preference soils. However, even on the poorest quality soil (*Papil*, Fetlar, Shetland) there is evidence of arable cultivation activity. The ten *Papay* and *Pabbay* names (island names) occupy the full range of soil preference categories, with small clusters at the extremes (preferences 1 and 4) of the distribution. The six topographical *papar* names also occupy the full range of the distribution; there is however no evidence of clustering within this distribution.

Examining each of the three island groups (Table 2b) demonstrates that the ten *papar* place names in the Western Isles are dominantly associated with localities that are first preference soils for agriculture, with a full range of preferences also evident. In contrast, five of the Orcadian *papar* place names are clustered within the third soil preference category with two in the second soil reference category. Further marked contrasts are evident in Shetland where four of the nine *papar* place names are associated with the second soil preference category with a further four in the fourth soil preference category; one *papar* place name is associated with the third soil preference category. The number of *papar* place name locations in Caithness are only two; little can be concluded from this limited size of population.

		Name - location	Archaeological & historical information	Soil information	Preference category	
Western Isles	<i>Settlement names</i>	Pabail, Stornoway	Dykes & clearance cairns	Non-calcareous gleys; some humic gleys	3	
		Pabaible, Taransay	Manured, delved; corn cultivation; 'very fruitful'	Brown calcareous soils; some peaty gleys	1	
		Paible, North Uist	an 'ounceland'	Humus iron podzols; some non-calcareous gleys	2	
	<i>Island names</i>	Pabay, Uig	corn cultivation; 'fertile'	Brown calcareous soils; calcareous regosols	1	
		Pabay, Harris	corn cultivation; 16 pennylands; 'fertile'	Brown calcareous soils; calcareous regosols	1	
		Pabbay, South Uist	No record (rock site)	Peaty gleys	4	
		Pabbay, Barra	'Mainly under pasture'	Brown calcareous soils; calcareous regosols	1	
		Pabay, Skye	Pasture	Brown forest soils; humus iron podzols	1	
	<i>Topographical names</i>	Pababish, Uig	Manured & delved; field system; 'fertile'	Brown calcareous soils; calcareous regosols	1	
		Papadil, Rum	Cultivation remains; 'coast arable and fruitful'	Brown forest soils	1	
	Orkney	<i>Settlement names</i>	Papley, S. Ronaldsay	Corn teind; small farm district; 'fertile'	Poorly drained non-calcareous gleys, brown calcareous soils	3
Papley, Eday			Teind (corn?); 'least fertile of northern isles'	Poorly drained non-calcareous gleys and peaty podzols	3	
Paplay, Holm			Teinds (corn?); 'fertile'	Freely and imperfectly drained podzols	2	
<i>Island names</i>		Papa Stronsay	Corn teind; 'fertile'	Non-calcareous gleys Freely and imperfectly drained	3	
		Papa Westray	Corn cultivation; 'fertile'	podzols	2	
<i>Topographical names</i>		Papdale, Kirkwall	Teind (butter); corn mills; 'good' soils	Poorly drained non-calcareous gleys	3	
		Steeven o' Papay	No record (rock site)	Rock site	na	
Caithness		<i>Settlement names</i>	Papil, Canisbay	No record (rock site)	Rock site? (poorly drained peaty gleys onshore)	3
		<i>Topographical names</i>	Papigeo, Wick	10 pennylands (includes Wick)	Poorly drained non-calcareous gleys	3
Shetland	<i>Settlement names</i>	Papil, Burra	Corn teinds; sheltered and fertile	Peaty and humus iron podzols	2	
		Papil, Bressay	Corn teinds	Peaty gleys; non-calcareous gleys	3	
		Papil, Fetlar	Corn teinds (poorest in Shetland)	Peat; peaty gleys	4	
		Papil, North Yell	Corn teinds	Peaty and Humus iron podzols	2	
		Papil, Unst	Fertile ground, corn teinds	Magnesian gleys; brown magnesian soils	2	
	<i>Island names</i>	Papa Burra	Pasture only	Peaty gley; peat	4	
		Papa Stour	Corn teinds; 'rich crops'	Calcareous regosols and gleys; peaty and non-calcareous gleys	2	
		Papa Little	Pasture only	Peat gleys; peat	4	
	<i>Topographical names</i>	PapaGeo, Aithsting	Pasture only	Peats	4	

Table 1: Summary of relationships between *papar* place names, archaeological / historical evidence of cultivation practice and soils information.

a) *Papar* places name types

Soil preference	'Settlement' names	'Island' names	'Topographical' names
1	1	4	2
2	5	2	-
3	5	1	2
4	1	3	1
n/a	-	-	1

b) *Papar* names in island groups

Soil preference	Western Isles	Orkney	Caithness	Shetland
1	7	-	-	-
2	1	2	-	4
3	1	4	2	1
4	1	-	-	4
n/a	-	1	-	-

Table 2: Association of soil preference categories (1-4) with a) number of *papar* place name types and b) number of *papar* names in island group.

In general the results suggest a slight trend towards the association of *papar* place name locations with better quality soils, or at least soils that, with appropriate and careful management of nutrients and water, could be used productively for early agriculture. These observations suggest that if agriculture was practiced, land management and land organisation techniques were robust enough to overcome inherently poor agricultural land in the Northern and Western Isles and Caithness. The more detailed breakdown of data indicates marked and potentially important contrasts when integrating the relationships between island group and soil preferences and between place name type and soil preferences allowing different patterns of organisation to be suggested. The dominant occurrence of *papar* place names with the best land in the Western Isles perhaps indicates that the *papar* were seeking out the best land and that such land was available for occupation on remoter, or more secluded, island (*Pabbay*) locations with or without a small secular community. It is of interest that, although the sample size is small, the settlement (*Papil*) names are associated with a range of soil preference categories, perhaps implying a group for whom living alongside larger secular communities was more important than good quality agricultural land in secluded locations. Some support for this view comes from the preliminary field based observations at Taransay (see below). A similar pattern is evident in Orkney with a suggested contrast between a *papar* group occupying remoter small island areas with high quality agricultural land, and a group more associated with the settlement names locating themselves where secular population levels were probably greater, but generally on marginally poorer

land. In Shetland a different pattern emerges where land of relatively poor quality – but suitable for the grazing of domestic livestock - is incorporated into *papar* place name locations. Here we suggest an addition to land management organisation associated with *papar* communities, with grazing livestock separated from the main settlement area in order to conserve environmentally limited levels of rangeland productivities.

Preliminary soil survey: evidence of anthropogenic soils and sediments

Free soil survey of Bailenacille, Pabbay established the occurrence of a deep top soil buried beneath wind blown calcareous sands. The fossil deep top soils are typically dark brown sandy silt loams with occasional small charcoals and between 40 and 60cm in thickness overlying imperfectly drained mottled soils (Table 3a). They are located immediately adjacent to the Teampull Mhoire site (Figure 2) and extend at least 150 metres to the north and east of the chapel site on south and south-east facing slopes (Figure 3). These soils are similar to the anthropogenic deep top soils of West Mainland Orkney (Simpson, 1997) and to the buried anthropogenic soils at Old Scatness, Shetland (Simpson et al., 1998). Such soils have been demonstrated to contain a soil record of past land management practices associated with their formation; they imply specific manuring strategies requiring the integration of animal manures, turf and, almost certainly, seaweed, as well as intensive cereal production. Their close association with the chapel sites on Pabbay, within the Bailenacille locality, opens the prospect of considering the role that the *Papar* may have had in introducing soil management techniques to Pabbay, and possibly other areas of the Western Isles. It is also possible to speculate that there may have been an early church-farm complex in this locality.

a) Teampull Mhoire, Pabbay: Grid reference: NA 8890 8705

0-21 cm	10YR3/2; calcareous sandy loam; clear boundary to –
21-65cm	7.5YR 3/2; sandy silt loam; occasional small 10YR2.5/1 charcoals; clear boundary to –
65-75cm	7.5YR 5/4 with rare small 7.5YR 7/8 mottles; sandy silt loam; clear boundary to bedrock.

b) St. Keith's Chapel, Taransay: Grid reference: NG 0314 9915

0-24cm	10YR 2/2; calcareous sandy peat; clear boundary to –
24-42cm	10YR3/2; sandy silt loam; frequent shell (<i>Cardium ssp.</i>); rare small bone (mammal) fragments; rare small 10YR2.5/1 charcoals; clear boundary to –
42-88cm	7.5YR3/2; silt loam; frequent shell (<i>Cardium ssp.</i>); rare small bone (mammal) fragments; common small 10YR2.5/1 charcoals; clear boundary to –
88-95cm	2.5Y4/2; sandy loam; rare small bone (mammal) fragments; rare small 10YR2.5/1 charcoals; clear boundary to –
95-105cm	2.5Y 5/3 with occasional small 7.5YR 7/8 mottles; sand; clear boundary to -
105-110+cm	5YR 5/3; occasional medium 7.5YR 7/8 mottles; sandy clay loam.

Table 3: Field descriptions of cultural soils and sediments: a) anthropogenic raised soils associated with Teampull Mhoire, Pabbay; b) midden deposits associated with St. Keith's Chapel, Taransay.



Figure 2: Teampull Mhoire, Pabbay. Anthropogenic, raised soils are located immediately adjacent the site, buried beneath calcareous wind blown sands.

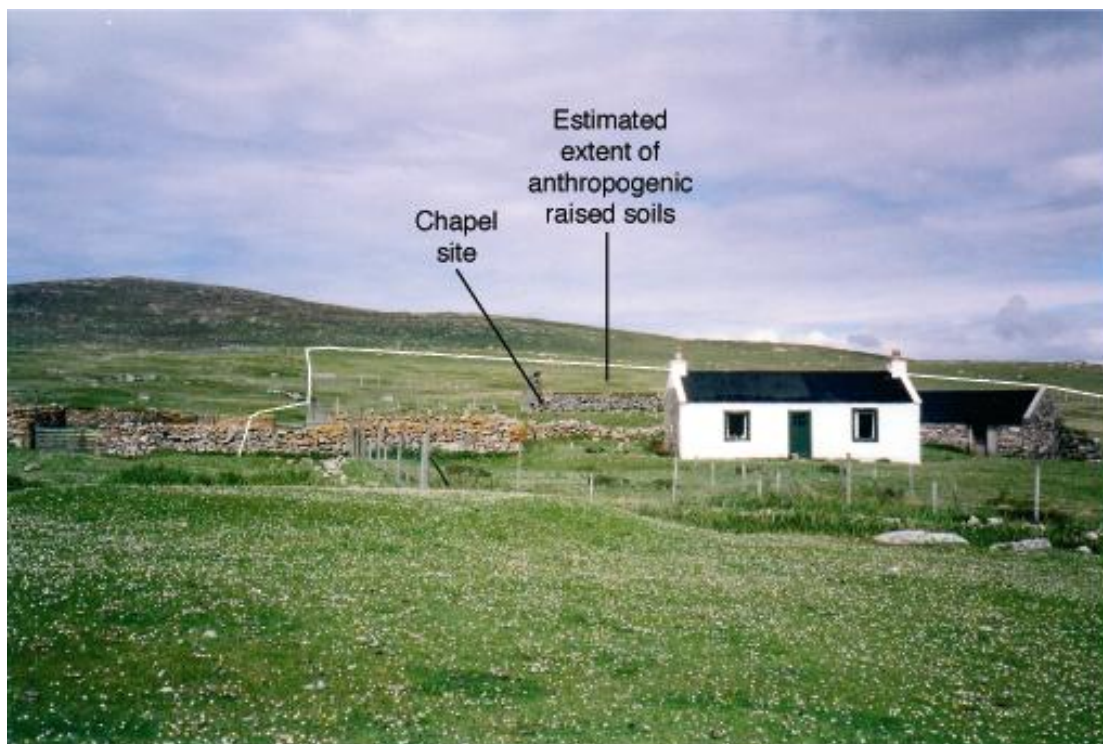


Figure 3: Teampull Mhoire, Pabbay. Anthropogenic raised soils extend at least 150 metres to the north and east of the chapel site, on south and south-east facing slopes. These soils do not extend in front of the croft.

In contrast, extensive survey in Paible, Taransay, revealed no significant evidence of anthropogenic raised soils; soils in the locality are characterised as wind blown calcareous sands with gleyed soils beneath the sands, and peaty gleys. It may be, however, that evidence of earlier arable and raised soils is buried at depth beneath sand, or that arable areas have been lost to coastal erosion. Evidence of midden deposits up to a metre in thickness were however identified immediately beneath and adjacent to St. Keith's chapel (Figure 4). This midden material is characterised as dark brown and dark grey brown sandy silt loam and silt loam with the occurrence of shell, small charcoals and small domestic mammal bone fragments (Table 3b). These observations imply that the chapel site was founded on earlier site occupation, suggesting that the *papar* may have settled in an already full landscape. This discovery opens up the prospect of examining relationships between incoming Celtic ecclesiastical settlement and earlier occupants of the landscape – were the *papar* given these locations; did the existing residents stay or did they move?



Figure 4: St. Keith's Chapel, Taransay. Midden deposits up to a metre in thickness are identified immediately adjacent the chapel site.

Conclusions

While recognising the limitations of desk-based data and the preliminary nature of soil survey observations, a picture of the *papar* and their relationship with the land they occupied in the Northern and Western Isles and in Caithness begins to emerge from this study. We would suggest that if incoming Vikings and Norse were applying the *papar* name, then it was being applied to at least two distinctive but perhaps integrated ecclesiastical communities. One community was associated with secluded and more remote island areas very often with some of the best agricultural land, with this pattern arguably more evident, but not exclusively, in the Western Isles. Whether this group deliberately sought out these locations, one step away from the eremitic community occupying isolated stacks but with whom they could have been integrated, or whether a resident secular population offered secluded areas is as yet uncertain. A second group, perhaps more evident in Orkney and Shetland, but again not exclusively, is more associated with the settlement names and appear to be located in more central and important locations and often on slightly poorer quality agricultural land. We suggest that these communities were part of a more densely populated cultural landscape. A variant of this is evident in Shetland where we suggest a *papar* located in areas of poorer quality land providing a domestic livestock element to the economy of a larger, more central, ecclesiastical settlement.

Irrespective of the interpretations given above, it is clear that the majority of *papar* names in the Northern and Western Isles are associated with areas of very good to medium quality agricultural land which, with the agricultural land management of the period, would allow good yields. It follows that as well as the eremitic solitude seeking *papar* finding their way to the Northern and Western Isles, there is emerging evidence of agriculturally based early ecclesiastical communities, some occupying more secluded areas while others possibly living adjacent to or within the secular community. A key task is now is to determine the nature of land management practices associated with these agriculturally-based *papar* and to determine their contribution, over and above the places that bear their name, to the development of the cultural landscape in the Northern and Western Isles.

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