

Pigs in the Faroe Islands: An Ancient Facet of the Islands' Paleoeconomy

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Abstract - This paper discusses the evidence for pig husbandry in the Faroes during the Norse and early Medieval periods. The evidence from zooarchaeology, biomolecular archaeology, and place-name evidence is reviewed, proposing that the keeping of pigs was an important part of the early paleoeconomy of the islands.

Introduction

When Faroese agriculture or agricultural issues have been discussed from an historic viewpoint, little has been written concerning the keeping of pigs. Although this issue has been briefly mentioned in occasional historic or anthropological papers (e.g., Joensen 1982:91–93), only Bjørk (1970) has considered this issue in depth, with his analysis focusing on the Reformation and later post-Medieval period. The conclusion from his research is clear, demonstrating that pig farming was only a very minor component of the agricultural economy in the post-Medieval period and that only the occasional pig would have been kept at farms around the islands in the 17th–19th centuries.

This conclusion was based upon ancient documents, including copyholds, valuations, and cadastres, dating from the 17th and 18th centuries. Also, there is no mention of pig farming in contemporary 17th-century accounts (cf. Debes 1963, Tarnovius 1950). Another contemporary observation by the Norwegian Peder Claussøn Friis stated in 1592 "... they do not keep many swine there." (Bjørk 1970:36, Claussøn 1632:149, Storm 1881:67).

However, Bjørk (1970) points out that, based upon the discussion of place-names in the northern islands of the Faroes, the Faroese philologist Christian Matras was of the opinion that prior to the Reformation, pigs had been kept in the northern islands and other locations around the islands (Bjørk 1970:35, Matras 1933). According to Bjørk, several place-names exist that derived from words associated with possible pig-farming practices. Also, a few pig bones were found at some Norse and Medieval archaeological sites, such as in Kvívík (Dahl 1951). Bjørk (1970:37) concluded that there are clear indications that pigs had been kept in the Medieval period in the Faroes.

Bjørk argued that the main reason for the removal of pigs from the economy was the detrimental effect they had on the land, a common problem across the North Atlantic islands (Dugmore et al. 2005). For example, he points to the Commission

recommendation from 1709–10, where it states that although a few pigs were kept at the time, this was not the norm, as "... pastures and fields are thereby utterly destroyed." (Degn 1934:70–71). Also, he cites a copyholder document dating to 1751 that stated that pigs "... to spare the land, have been abolished" (Bjørk 1970:36). It is worth noting, however, that when the young Faroese student Jens Christian Svabo presented his recommendations designed to improve the Faroese household in the late 18th century, he recommended that the Faroese should utilize pigs and whatever secondary produce that could be obtained (Svabo 1773 [1937]: 223, 228, 231).

However, recent archaeological, biomolecular, and place-name analysis has provided new insights into the keeping of pigs during the Norse and early Medieval periods in the Faroes. This paper presents the latest zooarchaeological and biomolecular results from archaeological excavations at the site of *Junkarinsfløttur* on the island of Sandoy (Arge 2001, Church et al. 2005, Lawson et al. 2005) and contextualizes examples of field monuments that could derive from ancient pig farming located through place-name analysis (Arge 2005a, 2005b).

Zooarchaeological Sources in the Faroes

It is not unusual to find animal bones during archaeological excavations in the Faroes, though the wet, acidic nature of the soil on some sites precludes bone survival. For example, during the first detailed archaeological investigation in the islands in 1941 at *Niðri á Toft* in the village of Kvívík, animal remains were recovered and the possibility of ancient pig farming was first debated (Dahl 1951:89).

On-site soil conditions and bone survival may vary within the same village, such as in the village of Leirvík on Eysturoy. A substantial number of well-preserved animal bones were found during excavations in the 1990s of Norse settlement remains at the site of *í Uppistovubeitinum*, which is located in the upper part of the old infield (Arge 1995, 1997:36–37), while only small fragments and cindered bone

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remains were found during excavations in the 1980s of the Viking settlement *á Toftanesi*, which is located down by the shoreline (Hansen 1991:50, Vickers et al. 2005:704). The use of appropriate collection methods is vital in zooarchaeological analysis (McGovern 2004), and modern approaches routinely use a variety of sieving strategies to recover ecofacts and artifacts. The investigation of the sheiling site of *Argisbrekka* is an example of good practice (Godfredsen 2007), and the publication of material from other recent archaeological excavations in the Faroes is expected in the near future. The largest zooarchaeological assemblage of Norse date to be excavated in the Faroes has recently been recovered from the excavations at *Junkarinsfløttur*, where dry-sieving (4-mm gauge) of all archaeological deposits was routinely undertaken.

***Junkarinsfløttur*, Sandur, Sandoy**

Due to an unusual prolonged period of drought in the summer of 2000, large areas of the sandy embankment north of the church in the village of Sandur suddenly collapsed and eroded, exposing an approximate area of 80–90 m in length, containing cultural layers in *Junkarinsfløttur* (see Fig. 1). This

erosion extended northwards to another locality named *Undir Breytasandi*, close to the beach innermost at the bay of Sandur. In August 2000, the Faroes National Museum surveyed the area and undertook exploratory investigation of the two sites mentioned above (Arge 2001).

The layers at *Junkarinsfløttur* were over 2.5 m thick and consisted of a series of midden deposits, interspersed with tantalizing glimpses of walling and structural complexity. The remains represented the eroding edge of a farm-mound, a common archaeological phenomenon in the North Atlantic. Common artifact types recovered included multiple pieces of local pottery fragments and iron nails/rivets, two re-worked steatite spindle whorls, and rare pieces of worked bone, including a pin head and a small fragment of a comb. The most interesting artifact recovered was a bronze buckle, which was uncovered in the earliest basal deposits. A special feature of this buckle, which has a diameter of 3.6 cm, is its circular, wedge-shaped form. The closest parallels of a similar type of buckle have been retrieved from a few Viking graves in Iceland. They have been dated to the 10th century and are believed to be of Baltic origin (Arge 2001).



Figure 1. The view across the bay of Sandsvágur to *Junkarinsfløttur*, located on the eroding coastline to the right of the church in the village of Sandur with the site of *á Sondum* on the nearest side of the bay (Photograph © S.V. Arge).

A key feature of the site was the neutral pH of the free-draining sandy soil that produced the best preservation system for bones yet seen on an archaeological site in the Faroes. In 2003, an international team extended the sondage first excavated in 2000 as part of the “Landscapes circum landnám” project investigating the Norse settlement of the North Atlantic islands (Edwards et al. 2004). The sondage was enlarged to extract zooarchaeological and archaeobotanical remains, to undertake geoarchaeological analysis, and to date the sequence through radiocarbon dating (Ascough et al. 2006, Church et al. 2005, Lawson et al. 2005). Three further seasons of excavation in 2004–6 of the eroding edge and the area immediately behind the eroding edge has revealed a Late Norse structure associated with the upper levels of the eroding midden deposits, confirming the identification of the site as a large Norse-period farm mound (Fig. 2). The site forms the focus of a multi-disciplinary research project, the “Heart of the Atlantic” project, that is exploring the changing cultural and natural landscapes on the island of Sandoy, from first settlement to modern time.

Based upon the stratigraphic sequence, artifacts, and over 20 radiocarbon dates, the site was separated into three overlapping chronological phases:

UJF1 (dated to 9th–12th centuries), UJF2 (dated to 11th–12th centuries), and UJF3 (dated to 11th–13th centuries). The zooarchaeological assemblage from 2003 (total NISP = 10,445) showed that the proportion of animal bones representing domesticated mammals was relatively small in all three phases (between 2–8%), compared to the amount representing birds, fish, and molluscs. The large majority of the identifiable fish-bones stem from the cod family (Gadidea), particularly the Atlantic cod (*Gadus morhua*), but the freshwater resources of the nearby lake of Sandsvatn were also exploited. A large variety of bird bones were recovered, proportionally dominated by puffin (*Fratercula arctica*). Figure 3 presents the changing proportions of domestic mammal bones in the three phases. The relative proportion of cattle bones decreased between the oldest and subsequent phases with an increase in sheep/goat, a pattern widely observed in most North Atlantic Landnám sites (Dugmore et al. 2005). It is interesting to note that compared to Iceland and Greenland the number of cattle bones was considerably fewer at *Junkarinsfløttur*.

Excavations at *Junkarinsfløttur* during the 2003 field season recovered pig bone fragments from all three phases of the site’s occupation. Analysis of



Figure 2. Archaeological investigations of the eroding cliff at *Junkarinsfløttur* (Photograph © S.V. Arge).

the elements present in each phase suggests that the assemblage represents whole animals, rather than provisioned cuts of pork. Figures 4, 5, and 6 illustrate the elements found in the 2003 assemblage for UJF1, UJF2, and UJF3, respectively. While the majority of bones in each phase come from the hind- and fore-legs, the assemblages from UJF1 and UJF3 contained skull fragments as well. It is important to note that

most pig ribs and vertebrae cannot be differentiated from those of similarly sized animals (such as sheep) and are therefore not identifiable to species level. Therefore, it is probable that some of the rib and vertebra fragments present in the *Junkarinsfløttur* faunal assemblage that were only identified to mammalian level belonged to pigs, and the absence of these bones in Figures 4, 5, and 6 does not necessarily indicate

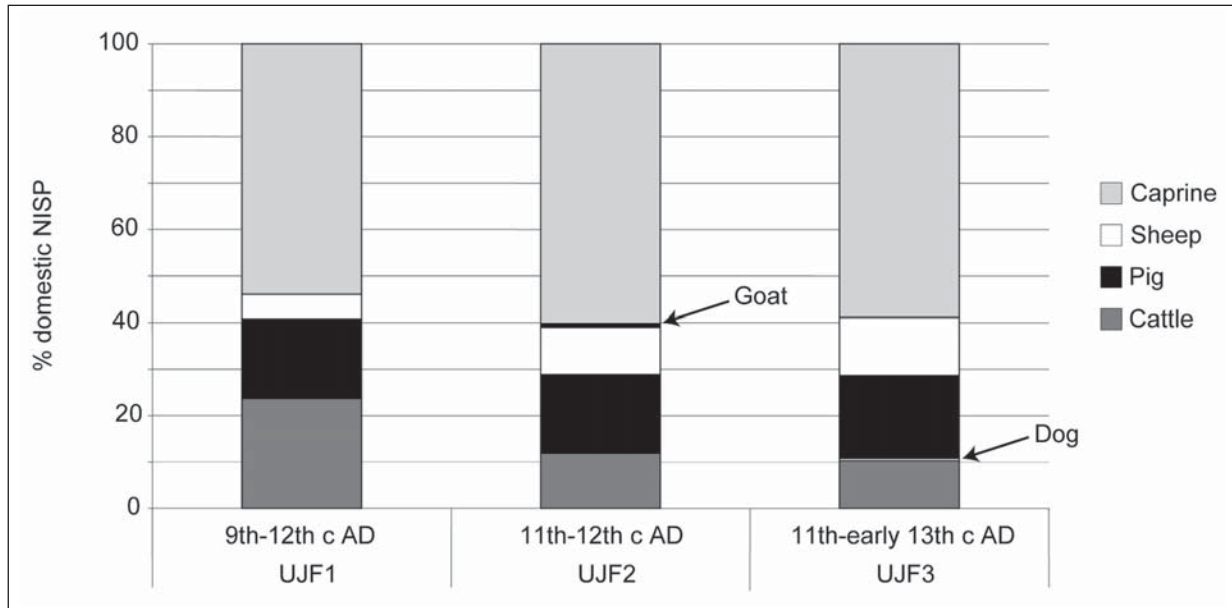


Figure 3. Changing proportions of domestic mammal bones from the 2003 *Junkarinsfløttur* archaeofauna (domestic mammal NISP = 435). Small percentages of goat and dog bones in two samples are arrowed.

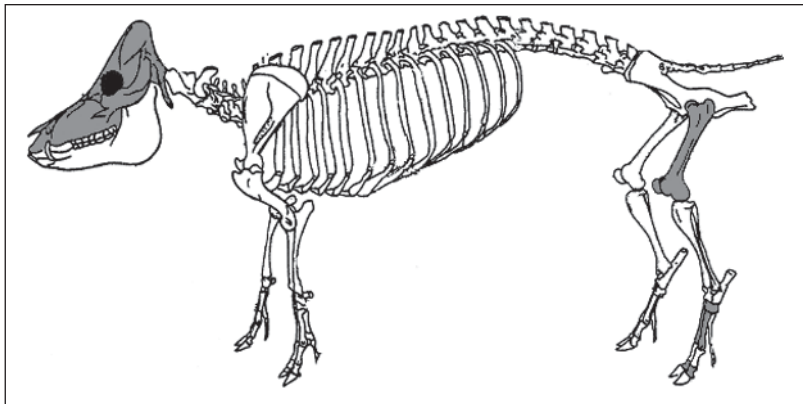


Figure 4. Pig element recovery from UJF1 (NISP = 13).

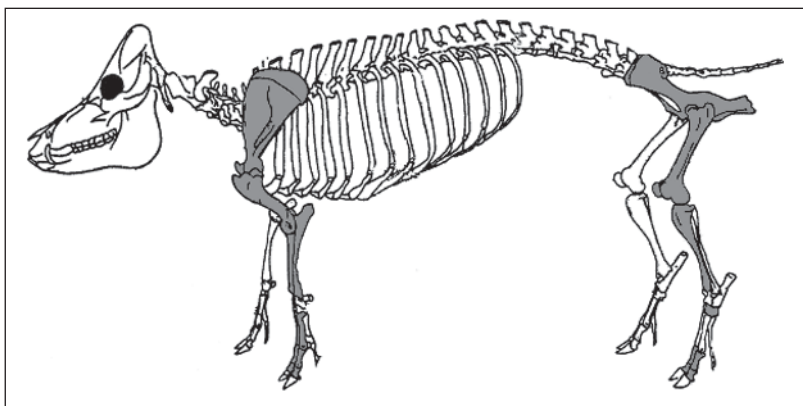


Figure 5. Pig element recovery from UJF2 (NISP = 30).

the actual absence of these bones in the assemblage. Butchery marks were evident on only three bones and, while not numerous enough to allow for a detailed analysis of butchery practices, are consistent with disarticulation of the carcass for consumption.

A substantial number of pigs are also common-place in Landnám sites on Greenland and Iceland, but in both places, pigs rarely survive as a major element in the domestic economy beyond the mid-11th century (Fig. 7). For example, in Iceland during the

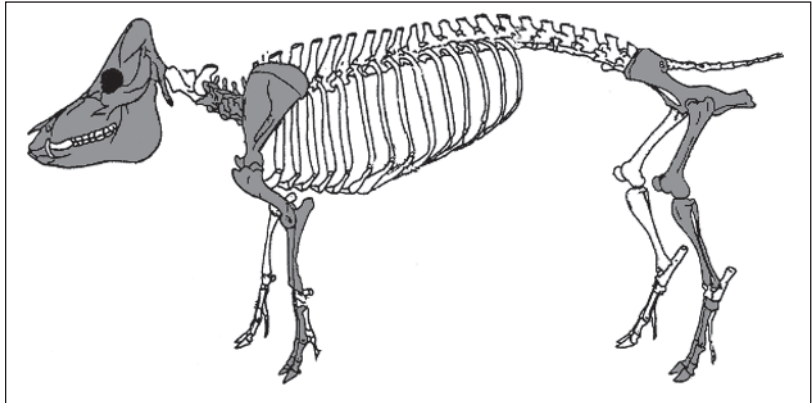


Figure 6. Pig element recovery from UJF3 (NISP = 43).

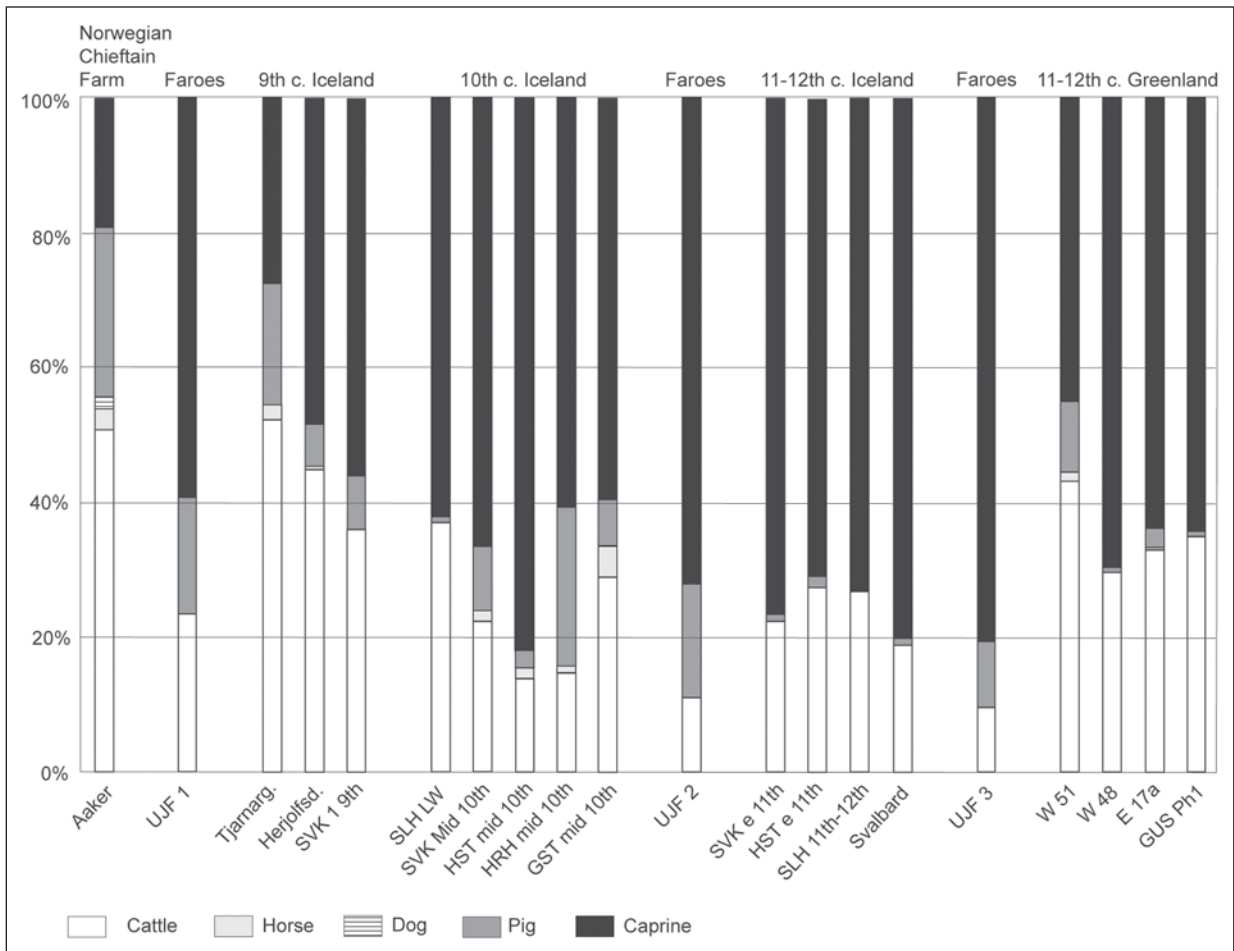


Figure 7. Proportions of pig bones in mammalian components of Norse-period zooarchaeological assemblages in the North Atlantic. Faroes: UJF1, 2, and 3 = *Junkarinsfløttur* phases; Norway: Aaker = Aaker (Perdikaris 1990); Iceland: Tjarnarg. = Tjarnargata 4, Herjolfsd. = Herjolfsdalur (Amorosi 1996); SVK L 9th = Sveigakot late 9th-century AD phase, SVK mid 10th = Sveigakot mid-10th-century AD phase, SVK e 11th = Sveigakot early 11th-century AD phase, SLH LW = Selhagi Lower = 9th–10th-century AD phase, SLH 11th–12th = Selhagi 11th–12th-century AD phase, HST mid 10th = Hofstaðir mid-10th-century AD phase, HST e 11th = Hofstaðir early 11th-century AD phase, HRH mid 10th = Hrísheimar mid-10th century AD phase (McGovern et al. 2001), GST mid 10th = Granastaðir mid-10th century AD phase (Einarsson 1994), and Svalbard = Svalbard (Amorosi 1992); Greenland: W 51 = Site W 51 (McGovern et al. 1996), W 48 = site W 48 (McGovern et al. 1983), E 17a = Site E 17a (McGovern et al. 1993), and GUS Ph1 = Gården Under Sandet Phase 1 (Enghoff 2003).

landnám of the 9th century, proportions of between 10–25% of the contribution of pig bones to the overall NISP of a zooarchaeological assemblage are common, whereas by the 11th–12th centuries the proportions have decreased to less than 3%. This trend has been interpreted (cf. Dugmore et al. 2005, McGovern et al. 2007) as a response to the environmental degradation caused by free-range pannage by pigs. Conversely, pigs are present in all phases at *Junkarinsfløttur* and maintain an approximately equal proportion of the assemblage in each phase. This finding may indicate that a pig-farming economy was highly esteemed in Sandur and may have continued in the islands as an entity at least until the 13th century. Preliminary analysis of the smaller zooarchaeological collection from the Viking- and Norse-period midden deposits at *Á Sondum* across the bay (McGovern et al. 2004) have also confirmed the continued presence of pigs from the 9th–12th centuries AD.

The recovery of a substantial number of pig bones from the site raises a number of interesting questions concerning the management and keeping of pigs in the Norse and early Medieval Faroese landscape. Other lines of evidence can be useful in exploring these issues, including place-name evidence, field monuments in the outfield, and biomolecular analysis of the bones themselves.

Place-names and Cultural Remains

The structural remnants of various agricultural activities are found across the infields and outfields of the Faroes, such as pens, shelters, and various dyke constructions that have been used in connection with cow and sheep farming for centuries. There are also other structures that have not been used in recent centuries, and therefore the knowledge relating to their usage has disappeared. In several instances, however, place-names are attached to the remnants that are indicative of their use (Arge 2005b). In this particular case, it is interesting to note that there are also examples of place-names associated with ancient pig keeping.

In the place-name files at the Faculty of Faroese Language and Literature at the Faroe University there are approximately 140 names that comprise the words *-svín* (swine), *-grís* (pig), *-súgv* (sow), *-galta* (boar), and *-purk* (pig). These are names that may directly stem from pig farming or indicate a similar activity. Figure 8 presents all of these names across the islands. The majority of the place-names stem from the southern islands and from the northwestern areas of the larger islands, *Vágoy*, *Streymoy*, and *Eysturoy*. It appears that the eastern areas of these same islands, as well as the northern islands, have less concentration of these names, which may be a

function of topography, altitude, slope aspect, distance to the nearest settlement, and vegetation cover. These names are both related to natural topographic features and to artificial structures. Place-names indicating topographic features, such as *Svínadalur* (pig-valley) and other names with *-bottom*, *-terrace*, *-brae*, *-rock*, *-ledge*, and *-depression*, indicate that pigs have been common-place in the outfield, where they may have been free-ranging or perhaps under supervision and kept in special pens or enclosures, as well as in more inaccessible places like islets and holmes off the coast.

There are also place-names that relate to artificial structural remains. Names ending with *-dyke*, *-pen* and *-outfield fold* (for example *Svínagarður*, *Grísagarðarnir*, *Svínaból*, *Galtaból og Galtatrøðin*) show it has been necessary to construct dykes or folds where pigs would have been kept. Other names end with *-house* and *-ruin/s* (for example *Svínhús*, *Svínatoft*, *Grísarhús*, *Grísatoftin* and *Purkhús*) and show that pigs were likely to have also been kept indoors, both in the infield and outfield.

It is important to confirm if any structural remnants are present at these sites, so they can be investigated and the place itself surveyed in detail. To date, no systematic surveying has been undertaken. However, confirmation of structural remains at places bearing these place-names is already possible at several locations, as for instance at the site of *Svínatoftir* (Swine-ruins) in the outfield at the village of *Sørvágur* by Vagar airport (see Fig. 9). The following section outlines some more examples from the central island of Sandoy on which *Junkarinsfløttur* is located, highlighting their position in relation to settlement patterns and the wider landscape.

Place-names and archaeological remains on Sandoy relating to ancient pig keeping

There are a total of twenty-two place-names relating to pig keeping on Sandoy (see Fig. 10), and it has been possible to confirm all of their locations in the field. It is worth noting that on the whole of the island it is only in the village of *Dalur* that no locations bearing pig place-names are present. All the other villages of settlement age on the island contain from three to eight pig place-names.

The great majority of pig place-names are in the outfield. In the village of *Skálavík*, all the infield names are in the same location at the bottom of the old infield, beside and inside the býling-settlement *á Trøðni*. This fact may indicate that pigs were kept by themselves on this limited land plot. Here, the place-name *Svínajørð* (Swine-land) (1) is found, interpreted as a strip of land. On the top of this

Figure 8 (opposite page). Location map and pig-related place-names across the Faroes by *bygdir* (adapted from Fig. 4 in Arge 2005a).



plot is the place-name *Svínabrekkan* (Swine-brae) (2), while *Grísaoyran* (pig-spit) (3) lies beside the stream running under this same land plot. *Svínaliður* (Swine-gate) (4) was the gate in the dyke surrounding *Svínajørð* (Swine-land). No remnants of this gate remain. *Svínageil* (Swine-path or passage) (5) is located just beside Swine-gate. These names may reflect the driving of pigs through the infield dykes to the outfield, where they have been driven further afield by the swine-paths, of which many examples exist in the place-name register.

In the outfield somewhat north of the village are the names *Niðari* (Lower) (6) and *Ovari Svínstíggjur* (Upper Swine-path) (7). Beside the *Ovari Svínstíggjur* are structural remains that run at an angle from a small rocky outcrop. Without a detailed survey and targeted excavation, it is not possible to say anything about the function of this structural form. Further north in the outfield, we find in the *Norðastahaga* the place-name *Galtabólið* (Boar-fold or pen) (8). This feature is a natural projecting crevice that may have doubled as a fold and indicates that not all –fold or –pen names relate to artificial structures.

Svínstíggj names (Swine-path names) are found at several locations on the island. In the village of Húsavík is the name *Svínstíggjur* (Swine-path) (9)

located just inward of the village in the valley north of the stream. The plural, *Svínstíggjaheggjar* (Swine-path-mounds) (10), which is located on Vatnabrekka towards the lake of Lítlavatn, is associated with the low mounds present in the area. They are on both sides of the village boundary marker between the villages of Húsavík and Skálavík. According to the place-name list at the University, the name *Svínstíggamýra* (Swine-path-bog) (11) is also to be found at this location. However, it has not been possible to locate this name precisely, though it seems to relate to a peat bog where peat has been cut for generations. At *Innastahaga* by the village of Skarvanes is the place-name *Stíggjurin á Svínhúsi* (Swine-house-path) (14). The name may suggest the path once passed by a house, though today there is no visible trace of any house remains. In the same outfield, just east of the lake of Stórvatn are the place-names *Svínstøðaheggjurin* (Swine-fold-mound) (12) and *Svínstøðastøða* (Swine-place) (13). The latter name could possibly be *Svínstíggastøða* (Swine-sty-fold) or just *Svínstøða* (Swine-fold) (Lawson et al. 2005). This indicates that by the mound was a designated place where pigs had been kept or gathered, and according to local tradition, a round enclosure was once present there. It is likely



Figure 9. *Svínatofir* in the outfield of the village of Sørvágur, Vágoy. On the site are some small stone structures, indicated by arrows, which have not been excavated (Photograph © S.V. Arge).

this was the case, as it is still possible to discern ephemeral structural remains by the mound.

In the village of Sandur, there is only the one name in the infield, *Galtatrøðin* (Boar-plot) (15), which is located below the houses of the býling-settlement, á Sondum. At the bottom of Sandsdalur lies *Gríshúsið* (Pig-house) (16), although no immediate visible signs of structural remains are visible at this site. On the west side of the island and east of Salthøvda, in the outfield called Søltuvíkshagi, is the placename *Svínadalur* (Swine-valley) (17), which is a shallow depression resembling a small valley. In the valley, are the place-names *Svínadalstøðlarnir* (Swine-valley-folds) (18, 19), and along the coastline below the valley lies *Svínaldalurðin* (Swine-valley-scrree) (20). The most prominent features though, are

the *Grísgarðarnir* (Pig-dykes) (21)—three low sod dykes on the steep slope on the eastside of the Salthøvdi—and on the beach below them lies *Grísurðin* (Pig-scrree) (22; see Fig. 11).

A number of general points can be raised about this collection of place-names. Firstly, the names are found both in the infield and the outfield, indicating that pig management was undertaken in both areas. Secondly, all of the place-names in the outfield are located in low-lying topography, generally below the 100-m contour, and none are to be found on the high ground. Thirdly, all of the place-names are very close to permanent water courses that would have provided water and wallowing areas for the pigs. However, proximity to running water in the Faroes is not an uncommon landscape trait! The positions

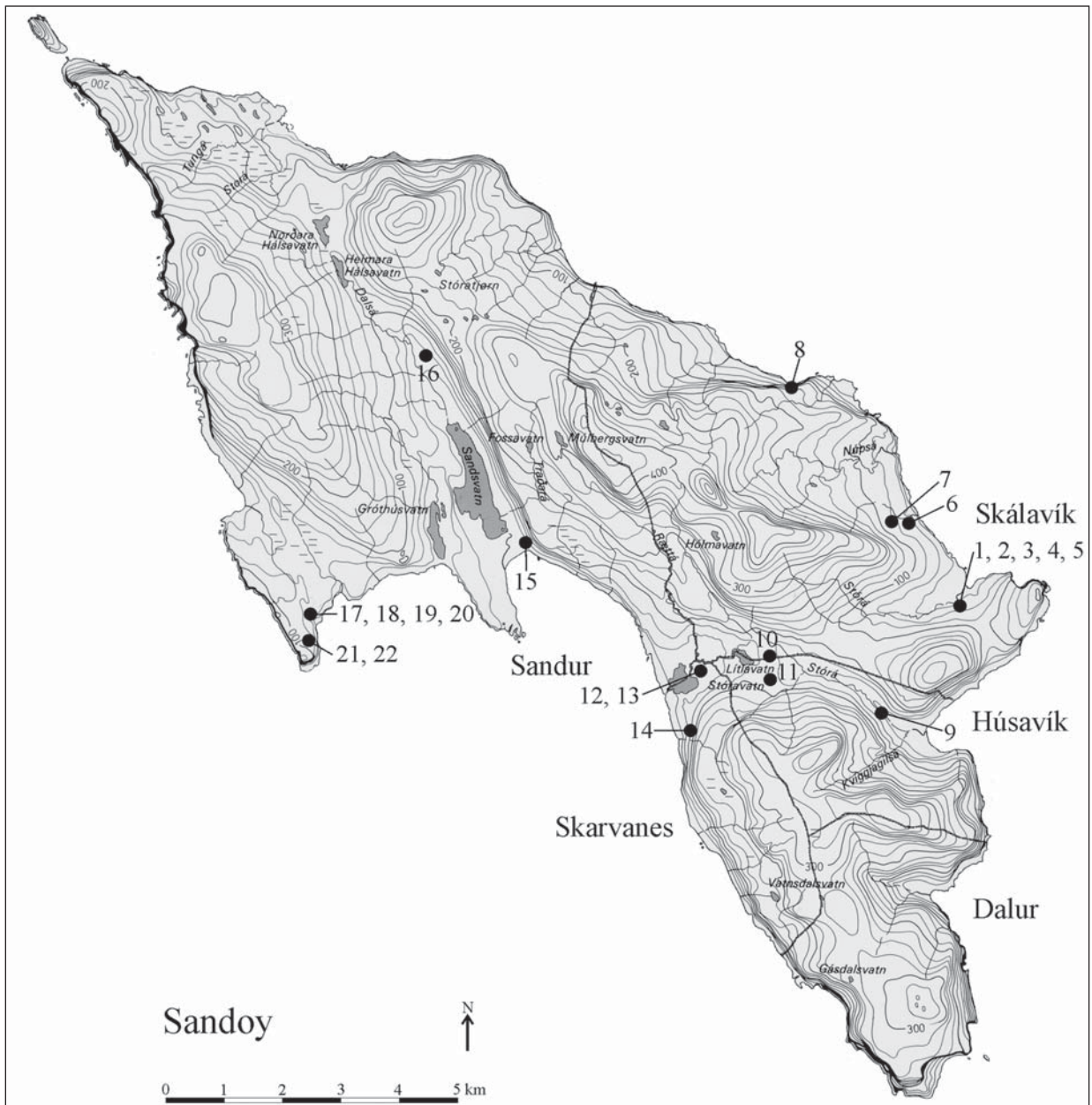


Figure 10. Pig-related place-names on Sandoy, showing village boundaries (adapted from Fig. 5 in Arge 2005a).

also correspond to the main lines of communication through the landscape, for example, in valleys and near to the coast, which suggests that the moving and driving of pigs may have occurred as part of a wider network of common communication links. It is also important to appreciate that the pig place-names are clustered around the infields and outfields of the three villages of Sandur, Skálavík, and Húsavík, presumably a function of their antiquity. However, it is also likely that pigs were kept in places where no surviving place-names indicate such activity. For example, it is possible pigs were kept along with cattle in outfields around the islands, as argued previously in association with place-names adjacent to Viking summer pastures (Bjørk 1970:40–41, Fellows-Jensen 2002:94).

Pig Fodder

Another key research question addresses what the pigs ate. The place-name evidence suggests free-range pannage was sustainable in the outfield. It was a common practice across Medieval Europe for pigs to dig their sustenance from the ground (Biddick 1984, Ward and Mainland 1999). In Faroes, Claussøn Friis, whose information is written in 1592 (Rischel 1963:18), talks about pigs in the outfield having dug up the root of the tormentilla plant (*Potentilla erecta* L.): "... and their swine become fat

thereof from tormentilla ...” (Claussøn 1632:149). However, because of its high content of tannic acid, which has been used for tanning in the Atlantic islands, Bjørk seems to doubt this conjecture. He maintains the issue has been muddled, and the plant in question is buttercup (*Ranunculus* sp.) instead of tormentilla (Bjørk 1970:45–46). According to Fenton, however, it seems that in the Scottish isles it is common for pigs to eat the root of tormentilla (Fenton 1978:496). This claim is also supported by Shetland and Swedish sources dating from the 18th century (Olsen 2004:81). Both types of plant are very common across the infields and outfields of the modern vegetation of the Faroes (Fosaa 2000, 2001), as is likely to have been the case from settlement onwards. Also, buttercup seeds have been found in archaeobotanical assemblages from *Junkarinsfløttur* (Church et al. 2005) and *á Toftanesi* (Vickers et al. 2005), demonstrating the presence of the plant on the contemporary settlements, either growing on site or taken from somewhere else.

It is also equally true that pigs will eat almost anything organic. This fact made Svabo record the following; "... this useful glutinous animal almost rears itself ... it was not impartial to refuse discarded by man, as farmers do not care as well for their soil and gardens as they once did, and fattening then could have been achieved through barley, home grown corn, potatoes, and turnips.” (Svabo 1773



Figure 11. *Grísagarðar*—the pig-dykes—indicated by arrows on the promontory of *Salthøvdi*, Sandoy (21 on Fig. 10) (Photograph © S.V. Arge).

[1937]:223). Extensive midden deposits comprised of domestic waste have been found at a number of Norse excavations across the islands. This waste could have been used for pig fodder, through deliberate curation or opportunistic feeding by wandering pigs in and around the settlement. Based upon the proportionately large number of fish-bones uncovered at *Junkarinsflóttur*, it could be argued that much of the domestic waste from this site comprised discarded fish products. It was also hypothesized that the pigs may have been kept in sties and fed fish offal. To test for the presence of any significant marine component within the diet of the pigs, analysis was undertaken on the $\delta^{13}\text{C}$ values produced during radiocarbon determinations of pig bones from the site (see Table 1). This analysis formed part of an international project investigating piggery practices across the North Atlantic in the Norse and early Medieval periods, with the laboratory methods outlined by Ascough et al. (2007). The $\delta^{13}\text{C}$ values from the pig bones from Contexts 22 and 23 (in the earliest phase of the site) were consistent with values expected of animals feeding mainly within the terrestrial food web (cf. Arneborg et al. 1999, De Niro 1985, Gupta and Polach 1985, Koch et al. 1994), and matched the isotopic ranges of the two cow bones analyzed from the site (see Table 1). Though many more samples need to be processed to gain a statistically representative sample, the results provisionally suggest that a terrestrial diet was the mainstay of pig-keeping on the site and it is logical to suggest that the fodder was obtained away from the marine-rich waste areas near the settlements, i.e., in the outfields.

Some oral legends, sagas, and stories tell of pig farming in the Faroes. For example, in the saga of Snoppríkkur, it is said that while he was a farm hand at the farm í Giljum in the village of Hvalbøur on Suðuroy, he cared for seven pigs owned by the farmer. Instead of walking all the way from Giljum north to Elukonurætt (name of a pen or fold) by Sandvik to feed the pigs, he ate for himself what was edible and threw the rest away. The result was that the pigs died from hunger with only the carcasses remaining (Jakobsen 1961:14). The same story exists on the island of Skúvoy. The farmer, called Magnus Stóri

and reputed to have owned the whole island, is said to have kept pigs at *Grísarhúsinum uppi í Skor* (the Pigs-house at Skor—a place-name). However, the person he appointed to care for the pigs ate all the fodder intended for the pigs, which resulted in the pigs dying from hunger (Andreassen 1988:246). Both of these stories imply that deliberate production of food for pigs was a common practice, suggesting a mixed approach may have been made between providing fodder at certain points of the year (presumably in the colder months) and free-range pannage in the outfield for the rest of the year.

Pigs and the Environment

A number of multi-proxy paleoenvironmental studies have been conducted on sequences from peat bogs and lakes across the Faroes (cf. Edwards et al. 2005; Hannon and Bradshaw 2000; Hannon et al. 2001, 2005; Lawson et al. 2005, 2007a, 2008) that have presented a picture of remarkable robustness of the environment to human impact. The severity and scale of environmental degradation at *landnám* that occurred in Iceland, and to a lesser extent in Greenland, did not occur in the Faroes. This result is a function of a number of factors, including the comparatively mild Faroese climate, the peaty nature of the Faroese landscape, and the lack of tree cover. Few signs of major erosion episodes are noted, but one of the main impacts of *landnám* was the increased amount of phosphorus run-off into the lakes, modeled through chironomid analysis (Gathorne-Hardy et al. 2007; Lawson et al. 2005, 2008). It is argued that this increase was a result of the introduction of domestic animal dung into the soil and hydrological systems, with free-ranging pigs in the outfield part of the domestic introductions. This phenomenon has also been identified in the northern Iceland settlement landscapes of Mývatnssveit (Lawson et al. 2006, 2007b).

Conclusion

In conclusion, it has been argued that pig farming was an established aspect of the ancient Faroese

Table 1: Radiocarbon and isotopic results for selected pig bones recovered in the 2003 excavations at *Junkarinsflóttur* (from Church et al. 2005, with additional ^{15}N information).

Context	Sample ID	Material	^{14}C age (yr BP \pm 1 σ)	^{13}C (‰)	^{15}N (‰)
22	SUERC-3423	Cattle neonatal calcaneus unfused bone	990 \pm 35	-20.8	6.7
22	SUERC-3424	Pig distal femora shaft unfused bone	1035 \pm 35	-21.0	3.2
23	SUERC-3425	Cattle neonatal metacarpus distal bone	980 \pm 40	-20.8	5.6
23	SUERC-3410	Pig long-bone	965 \pm 40	-21.2	3.8
23	SUERC-3411	Pig long-bone	1075 \pm 40	-20.8	2.6
23	SUERC-3415	Pig long-bone	935 \pm 40	-21.3	5.5
23	SUERC-3416	Pig long-bone	1005 \pm 35	-21.6	6.6
23	SUERC-3426	Pig frontal bone (skull) with chop marks	1095 \pm 40	-22.5	7.4

household in the Norse and early Medieval periods on Sandoy. The ancient settlers brought pig-farming in their “landnám package” when they colonized the Faroes along with other islands in the North Atlantic (Dugmore et al. 2005). Through preliminary zooarchaeological investigations conducted at the sites of *Junkarinsflóttur* and *Á Sondum*, it has been confirmed that pig-farming was an important part of the Faroese paleoeconomy in the Viking and Norse periods up to at least the early 13th century. As was the case with two other Viking-period economic practices, the tradition of transhumance and sheep milking, this aspect of farming has disappeared in the intervening centuries.

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