

# Households on the Margin: Smallholder Resilience in Highland/Island Scotland

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## Abstract

By the late 19<sup>th</sup> century, thousands of small-scale farm families had been forcibly removed from Northern Scotland, as part of the clearances, to make way for agricultural “improvements” and the large-scale herding of sheep and cattle. A thousand years of locally adapted, sustainable farming knowledge was lost within a generation, for what was to be short-term profit and rapid land degradation. The resiliency of Scotland’s pre-clearance farmers was due largely to the importance of such concerns as local ecological knowledge, community integration, subsistence economy and property rights – each of which is vitally important to community well-being and sustainability throughout the circumpolar north today.

## Project Background: Pre-Clearance Small-Scale Farming in Northern Scotland

At the close of the first millennium, the height of the Medieval Warm Period had reached its maximum in Northern Europe (Dahl-Jensen et al. 1998; Barber et al. 2003). This anomalous period of mild climate was associated with large-scale intensification of agriculture throughout the British Isles and Europe (Fossier 1999; Dyer 2002; Alldritt 2003). This time also witnessed raiding by and later settlement of Norse farmers throughout the greater North Atlantic (McGovern 1990; McGovern et al. 2001; Bigelow 1991; Morris and Rackham 1992; Barrett et al. 2000). The Norse gained effective political control of Northern Scotland, along with its Northern and Western Isles, by the end of the first millennium. Although the beginnings of an economy based on pastoral dairying and intensive production of cereals are noted in indigenous contexts from c. AD 300-500 (e.g. Parker Pearson and Sharples 1999), by AD 1200, re-

search indicates that a pastoral expansion (for increased fodder) was accompanied by the production of surplus commodities such as dried fish, cereal grain and wool, throughout Northern Scotland and the Northern and Western Islands (Alldritt 2003; Barrett 1997; Barrett et al. 1999; Rorke 2006). The Treaty of Perth in the 13<sup>th</sup> century, brought an end to Norwegian political control in Northern Scotland and the Western Islands and ushered in a period of political instability as elites vied for political control of lands and the small-scale farmers that occupied them.

Until recently, most of what was known of rural Scottish householding came from biased pre-clearance descriptions (c.f. Findlatter 1845) that cast a rather negative light on the technology and production of small-scale farms for the period. Rural farming immediately pre-clearance was feudal in nature and organized via township settlements within given tenure areas (Alexander 1975). Each township consisted of an agricultural infield (in close proximity to the houses) that was plowed into long rows (rigs). Each household farmed particular rigs that were located in the infield region. The outfield areas were communal grazing zones under close scrutiny of the households. The rigs were fertilized with dung and midden on a yearly basis and grew a succession of barley and oats. Privately owned cows, sheep and goats were raised in the outfields. The run-rig system of farming was perpetuated via a complex set of heritable usufruct property rights until the clearances of the 18<sup>th</sup> and 19<sup>th</sup> centuries. Although the written record for small-scale farm production strategies during the Medieval Period is sparse, it appears that for the five hundred year project period (AD 1200-1700), the cumulative historical forces of political instability, climate change and growing market forces were buffered by the small-scale farming households of Northern Scotland, all while local power centers such as Finlaggan (Caldwell 1997; 2004) rose and fell.

## Household Economies of Resilience in Northern Scotland

Citing the limited knowledge of rural farming economics in Medieval Northern Scotland, archaeologists have attempted in recent years to fill the void left by written sources. However, the few archaeological attempts at understanding rural Medieval Scottish political economy have been based on data gleaned from specialized and/or higher status sites (Barrett 1997; Barrett et al. 1999, 2000; Batey 1987; Morris et al. 1995) and mirror other macro-scale historical reconstructions of the time period for Britain and Europe (e.g. Hodges 1982; Astill 1985). These studies have been important in detailing the larger economic forces (e.g. stockfish trade and growing European markets) in play during the Medieval Period for both Northern Scotland and Europe but they obscure the view of local household economies that operated in the region.

The current project attempts to add to our limited understanding of small farm production strategies (and the factors that helped them to persist for centuries) in a region marginal for agriculture. A question of critical importance concerns the degree of commodity production within household economies for the period of investigation (AD 1200-1700). The two primary export commodities for Northern Scotland during the Medieval Period were wool and fish (Barrett et al. 1999, 2000; Rorke 2006). The production of both commodities by small farmers would have required significant resources in the form of equipment (boats, lines, etc.) and stocking mixes (e.g. many male sheep castrates) that would have individually and collectively competed with subsistence-based food production. Active articulation with commodity trade networks, however, could have possibly offset losses in subsistence production via trade. Alternatively, small scale farmers could have based production primarily on subsistence needs and insulated themselves from precarious commodity markets, all while simultaneously marginalizing themselves from trade articulations. A more likely scenario involves some combination of subsistence and commodity focused production as a strategy for balancing household needs with market opportunities.

Netting (1993: 321) articulated a "smallholder" farming adaptation in order to define the processes by which small farms (that serve both subsistence and market demands) with continuous levels of production, tend to occur (and persist) in areas of dense rural population or marginal land. Netting (1968, 1981) attempted to show that the intensive agriculture of the smallholder was economically efficient, environmentally sustainable and socially integrative. Since the original formulation

of the smallholder model, both cultural anthropologists (e.g. Wilk 1997; Stone 1998; Sick 1999; Crate 2003) and archaeologists (Pyburn 1998) have highlighted its utility in helping to understand the mechanisms of resilience within small-scale farming societies. Smallholders' unique robustness is predicated on a wide-based subsistence strategy that is uniquely adapted to particular areas (based on local histories and environments) and modified as needed (Netting 1993). Because of smallholders' limited market articulation and wide-based subsistence strategy, archaeological measures of micro-level (household) economy will not accurately reflect wider macro-scale political economies but instead reflect local histories of subsistence in unique micro-environments *within* Northern Scotland. Theoretically, the smallholder adaptation is based in part on the neo-classical economic work of A.V. Chayanov. Chayanov (1966) working with Russian agricultural and demographic data from the 19<sup>th</sup> century, developed a model of peasant family-farm organization. Using neo-classical economic theory, Chayanov positioned the family household as the unit of production and consumption and in doing so, could explain certain peasant-based decisions that seemed to violate the normal expectations for profit farming. The strength of Chayanov, for Netting, was his microeconomic focus on the logic of household decision making in small-scale farming societies. However, unlike Sahlins (1972) and others who used Chayanov less critically, Netting did not believe in an isolated, self-sufficient "household mode of production" comprised of altruistic non-economic individuals. Rather, for Netting (1993), smallholders are organized at the household level and act in their own economic self-interests while balancing subsistence and market production in an ever changing world.

Another objective of the current project is to reveal the economies of small, rural, Scottish Medieval farms within the context of the better understood regional political economy of Scotland and the North Atlantic (Bigelow 1984; McGovern 1990; Barrett 1995; Barrett et al. 1999, 2004; Morris and Rackham 1992). These macro-scale views often overshadow the economies of individual farms and the mechanisms by which they operated. Rural farmsteads in Northern Scotland and the Western Isles managed to develop quite robust mechanisms for survival and the current project is an attempt to gain a better understanding of these factors. Based on archaeological investigations of large elite sites in Northern Scotland, the regional political economy is believed to have been heavily dominated by the production and trade of commodities such as fish and fish products (Barrett et al. 1999, 2004). To date, a proper economic characterization of small farmsteads in coastal Highland and Island Scotland has not been possible, due to

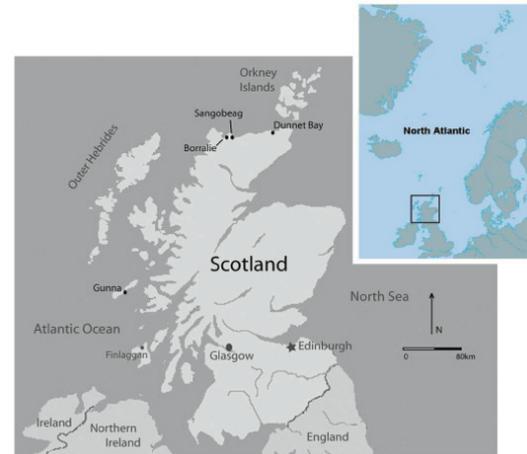
a lack of site investigations. Many questions remain to be answered. Was household production in this region focused on commodity production and trade, as seen in larger sites, or was it more independent and subsistence based? Alternatively, was household production perhaps a combination of both commodity and subsistence production? The current project contributes to our understanding of sustainable economic farm strategies in the agriculturally marginal North Atlantic region.

Archaeological evidence of rural Medieval settlement and economy in Scotland is poorly understood at present (Lelong 2003). Noting the absence of information concerning Medieval rural settlement in Scotland, Fairhurst (1968, 1969a, 1969b) initiated the systematic study of abandoned farm remains over thirty years ago. Fairhurst was unsuccessful at locating archaeological contexts predating the early modern period and little has changed regarding the location and study of Medieval farm remains in rural Scotland. In many regards, the Iron Age with its robust stone architecture is better understood than the Medieval Period that followed it. Although these data remain elusive, in recent years some progress has been made at locating rural Medieval settlements in the Scottish countryside (see Govan 2003 for review). Working as part of the MoLRS research group established in 1994, archaeologists in Scotland are beginning to have some limited success at locating rural settlements, as the small number of sites from the Highlands and Islands that contain Medieval remains is slowly growing (Lelong 2003). As part of the MoLRS group, Glasgow University Archaeological Research Division (GUARD) has investigated a series of four archaeological sites containing Medieval Period remains. Three of the sites are located along the northern coast of Scotland with the remaining site located in the Inner Hebrides. All of the sites contain archaeological deposits dating to the Middle to Late Medieval Periods (AD 1200-1700) and collectively offer the first comprehensive view of rural Medieval smallholder economies in Scotland.

## Project Data

Archaeological data for the current project were excavated from four sites (Borralie, Sangobeg, Dunnet Bay and Gunna); three from the north coast of Scotland and one from the Inner Hebrides (**Figure 1**). In Sutherland, along the northwest coast, two sites are located near Durness. Borralie and Sangobeg both contained Medieval midden deposits along with structural remains that have been dated via ceramics to the 13<sup>th</sup>-18<sup>th</sup> centuries (Lelong and Gazin-Schwartz 2004, 2005; Brady and Lelong 2001). To the east in Caithness, Dunnet Bay revealed midden deposits that included a bone comb dat-

ed to the 13<sup>th</sup>-14<sup>th</sup> centuries (Pollard 1999). The fourth site is located on the Isle of Gunna in the Inner Hebrides. Gunna contained extremely rich midden deposits, structural remains and was dated via ceramics to the 13<sup>th</sup>-18<sup>th</sup> centuries (James 1998). Each of these regions (North Sutherland, North Caithness and the Hebrides) has a unique history of Medieval archaeological investigations.



**Figure 1. Project Farmsteads in Scotland (AD 1200-1700).**

Throughout the Medieval Period, Scotland's two most important export commodities, based on export values, were wool and fish (Rorke 2006). Although data analysis is ongoing, preliminary findings from the four project sites are beginning to show a uniform pattern of household economic strategies aimed primarily at subsistence production with only minimal evidence for commodity production. Proxy animal profiles reveal stocking mixes dominated by sheep (ca. 60%) with lesser amounts of cattle (ca. 40%). The cattle remains suggest dairy production at each of the sites and are expected at small farmsteads for the time period throughout the North Atlantic. More interesting is the lack of any significant evidence for the raising of sheep for wool commodity production. Rather, sheep mortality and sexual dimorphism profiles from the project sites, reveal a pattern of female sheep being raised for milk production - a common strategy for subsistence farmers in other parts of the North Atlantic not engaged in wool commodity production (Fenton 1978; Aðalsteinsson 1981; Ingimundarson 1995).

Although a growing literature continues to unveil the emergence of the Medieval stockfish trade in Scotland and Northern Europe (Barrett 1997; Barrett et. al. 1999, 2004; Perdikaris 1999; Van Neer et. al. 2002) much of the evidence for its emergence and role in coastal economies of Northern Scotland comes from specialized fish processing sites (Barrett 1997; Barrett et. al. 1999), rather than more typical small-scale farmsteads located

on or near the coast. Fish specimens (although representing less than 10% of each site's overall faunal collection) from each of the sites were analyzed to establish proportions of represented species (and elements), butchery patterns, and size reconstructions, following adopted methods (Barrett 1997) for identifying the capture and processing of commercial North Atlantic fish. Commodity stockfish productions via a specific focus on larger deepwater gadids (e.g. cod and haddock) and butchery/processing patterns consistent with the creation of dried fish, was *not* noted for any of the project small-scale farmsteads. In contrast, a variety of small inshore species (e.g. labrids, cottids and rocklings) dominated the fish assemblages and suggests opportunistic shoreline fishing rather than focused stockfish production.

Northern coastal Scotland and the Hebrides had a distinct fiber-tempered pottery tradition that was active throughout the project period (AD 1200-1700) (Batey 1987; Ballin-Smith personal communication). By the 13<sup>th</sup> century, high quality redwares and grittywares were being manufactured along Scotland's east coast and traded throughout the country (Dunning 1968; Hall 2000). Additionally, Norwegian and continental trade wares were making their way to Scotland throughout the project period (Dunning 1968). Households with heavy investments in commodity markets were likely to have been consumers of import trade wares and these would be expected to be well represented within ceramic assemblages. However, very little import ceramic evidence was found at each of the project sites and overall, the ceramics were dominated (over 90% by number and weight) by the locally made dark fiber-tempered wares.

## Discussion

In summary, data from the four project sites reveal proxy measures of household economies suggesting a primary reliance upon subsistence-based strategies. Evidence of commodity production and active international trade are minimal and contrast significantly from political economic reconstructions involving larger, more elite sites from rural Scotland for the study period (AD 1200-1700). Dominant core areas such as urban England and trade centers of continental Europe, appear to have failed in pulling small-scale farmers of the marginal lands in Northern Scotland and the Hebrides into powerful commodity market systems. It was not until farmers from this region were physically removed from their farms that they began to fully embrace wage labor and commodity markets. For the millennia before this, household economies of small-scale farmers in rural Scotland appear to have been primarily subsistence

in focus with only minimal trade as an adjunct.

According to Netting's (1981, 1993) smallholder model, small-scale farmers do articulate with markets, as they can provide either cash or needed materials. However, the intricate household and community systems of subsistence can be jeopardized if too much emphasis were to be placed in commodity production or wage labor. The historical tenacity of smallholding groups such as those of rural Scotland is believed to be in part due to uniquely developed and environmentally reflexive systems of subsistence and community organizations, both which were critical for survival and actively protected. Quite simply, it is proposed that the smallholders of rural Medieval Scotland *chose* not to become fully involved in market economies of the region because they did not serve their needs as fully as the household and community based subsistence systems that had been carefully crafted for hundreds of years. The importance of subsistence economies within many current Northern societies continues to be debated. Although viewed as unprogressive and backward for their day, the subsistence based economies of Medieval rural Scotland were responsible for a rich legacy of ecological knowledge and population density that has yet to be matched since the land clearances of the 18<sup>th</sup> and 19<sup>th</sup> centuries. With respect to sustainable agriculture and resiliency in the North, often the true experts are those that reside there – and they have much to teach us.

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