

Landscapes of transhumance in Norway and Spain; Farmers' practices, perceptions and value orientations

Abstract:

The mountain areas of Europe have been of vital importance in the system of summer farming where movement of livestock between different altitudinal levels is a key element. However, summer farming has been downscaled considerably during the 20th century. This study describes two areas where summer farming is still practised: Forollhogna, Norway, and Asturias, Spain. The article documents the transhumance system in the two areas, and investigates how farmers view the summer farming system and landscape, how they relate to nature protection, and if specific value orientations can be detected in their views. The results show that the logic behind summer farming is the same in both areas: an economic motivation and access to grazing grounds. As for nature and landscape protection, the opinion that wild nature is given priority and the 'managed nature' of transhumance is overlooked, is found in both areas, although this is expressed more strongly in Asturias. Opinions and ideals related to 'good farming' are found in both contexts – this relates to well-kept fields and productive and healthy livestock.

Introduction

Transhumance, or summer farming, is a traditional system of resource use in Europe that has been historically important in upland agro-pastoral communities. The practice of summer farming requires that some members of the household move with their animals from the permanent dwellings in the village to temporary locations at different altitudes during the summer season. The logic is that growth of pastures occurs later at higher altitudes, giving animals access to more nutritious pastures as summer progresses (Orland 2000).

Summer farming provides pastures for livestock; milk and milk products are produced at the summer farmstead, and it often serves as a base for collecting winter fodder from the outlying fields for the period when the animals are kept indoors (Netting 1972; Daugstad 1999; Grabherr 2005; Dodgshon & Olsson, 2007). As a system of farming, transhumance in Europe has been studied extensively (Davies 1941; Hayward 1948; Netting 1972; Allan et al. 1998; Daugstad 1999; Olsson et al. 2000; Orland 2004; Olsson 2005; Dodgshon & Olsson 2007; Huband et al. 2010; Eriksson 2011). However, while historically important, in some parts of Europe the practice is in decline and there are notable differences across Europe in the attention given to and recognition of the importance of summer farming. These differences

relate to measures developed by the authorities for the protection of heritage and landscape, especially agri-environmental measures. Such measures provide important frameworks affecting the economic viability of farming at the micro-level.

This article presents a study of transhumance or summer farming practices in two different contexts: the *brañeo* system, dating back to the 7th century (Fernández Mier 2013, Fernandez Mier et al. 2013) and associated landscapes in Asturias, northern Spain; and the *seterbruk* system, dating back at least 1000 years (Daugstad 1999), in the mountain region of Forollhogna in central Norway. While summer farming is still in operation in both areas, it is currently undergoing increasingly rapid change due to rural and agrarian restructuring (Daugstad 1999; Gomez-Limon & de Lucio Fernandez 1999; Almås 2004; Collantes 2009; Baena & Casas 2010). It has been argued that agrarian restructuring has particularly significant effects in the mountain areas of Europe, which are characterized by small and extensive farming systems, remoteness and challenging natural conditions. Hence, agricultural adjustments or opportunities for diversification are limited, and marginalization and abandonment are often the result (Dodgshon & Olsson 2007; Schucksmith & Rønningen 2011).

In general, there is abandonment of transhumance practices in mountain areas. Lack of use due to reduced grazing and mowing can lead to negative landscape changes in terms of loss of biodiversity and cultural heritage, and diminishing experiential values tied to identity and recreation (MacDonald et al. 2000; Olsson et al. 2000; Grabherr 2005; Höchtl et al. 2005; Olsson 2005; O'Rourke 2006; Soliva et al. 2008, 2010; Bezák & Halada 2010; Kianicka et al. 2010; O'Rourke et al. 2012). Many countries with mountain regions and transhumance practices have implemented measures to support farmers and maintain the landscape, for example Switzerland and Austria (Orland 2004; Kirchengast 2009; Kianicka et al. 2010). In Norway, the decline in summer farming and resultant threats to important historical values have been focal points for the environmental, cultural heritage and agrarian authorities in Norway since the late 1980s. Measures to encourage farmers to continue the practice of summer farming include a special *seter* payment (implemented in 1989) provided animals graze for at least four weeks at the *seter*, and support for restoration of summer farm buildings. The *seter* payment varies between 25,000 and 50,000 NOK (4,300-8,600 USD) and is administered regionally (Daugstad 1999; Bryhn et al. 2008; Daugstad et al. 2011; Prop. 1 S. (2011–2012); Fylkesmannen i Sør-Trøndelag 2012; Vedum 2012). In Spain, national

measures specifically targeting summer farming are lacking and there is little awareness at the national level of summer farming as a practice or as a landscape with specific value.

However, some special measures have been implemented at the regional level, as in Asturias from the late 1990s (López 2002). In addition, the Common Agrarian Policy (CAP) of the European Union (EU) includes measures for Less Favoured Areas (remote, marginally productive areas), including mountain areas (Mazorra 2001; Nori & Gemini 2011).

The present study explores how agrarian restructuring is perceived and dealt with from ‘within’ by mountain farmers in Norway and Spain. Drawing on study sites in the two countries, general issues and peculiarities regarding the system under investigation might be discovered. Based on data from interviews with farmers, this paper aims first to explore the characteristics of the systems in the two differing upland communities. Second, the paper investigates how the farmers involved in *seterbruk* and the *brañeo* system view their practices and the landscape of summer farming, what kinds of changes they describe, whether they see these changes as positive or negative, and how they see the practice of summer farming in relation to nature protection as both study sites are close to or included in protected areas. Third, we examine the concept of ‘the good farmer’ or ‘good farming’ and how it is defined by the farmers in the two areas. By addressing these questions, we hope to explore farmers’ specific value orientations related to summer farming. Given the marginal nature of mountain farming, and the immaterial as well as material values upheld by such practices, more thorough knowledge about practices and priorities within mountain farming might be useful for authorities in designing measures targeting such landscapes and farming systems.

The Norwegian and Spanish agro-pastoral context

At the national level, the agrarian systems of Norway and Spain are markedly different. In Norway, located at the northern fringe of Europe, only 3% of the land area is arable land. Further, as a country that imports 50% of its agrarian-produced calories, upland and mountain pastures have been crucial for dairy and beef production due to the scarcity of arable land for fodder production in the lowlands while there are abundant natural grazing grounds in the mountains (Shucksmith & Rønningen 2011). In comparison, the highly productive regions of

southern Spain make the country one of the main contributors of agrarian produce in the Mediterranean region (European Commission 2010).

Maintaining agricultural productivity across the country has been an important goal articulated in Norwegian agricultural policies; the further goals of self-sufficiency and food security, rural employment and settlement, and environmental and landscape objectives give legitimacy to the high level of agricultural subsidies. Keeping beef and dairy production in the more marginal areas – upland, coastal and Northern Norway – has been an important aspect of these policies (Almås 2004; Rønningen et al. 2012). However, agricultural restructuring makes these objectives increasingly hard to reach. While there were 200,000 active farm holdings in 1959, this declined to 100,000 in 1989 and 43,500 in 2012. Pressure for rationalization and high investments by farmers, along with low profitability in spite of the subsidies, combined with a still very favourable job market outside agriculture, have made recruitment to agriculture increasingly difficult (Rønningen et al. 2012). The decline in farming is also reflected in a more or less parallel decline in summer farming in the mountain areas. There were close to 100,000 *seters* in use when summer farming was at its peak in the mid-19th century. The number of *seters* in use in 2012 is c. 1100, of which 13% are run as small co-operatives by two or more farmers (Norsk seterkultur 2012). The decline has been particularly strong since the middle of the 20th century.

From the 1960s onwards, the agrarian sector in Spain experienced a process of intensification and restructuring in the most highly productive parts of the country while agriculture was increasingly scaled back in poorer, typically mountainous areas (Gómez-Limón & Fernández, 1999; Romero-Calcerrada & Perry 2004). Consequently, massive rural depopulation followed (Calvo-Iglesias et al. 2006). While farming has experienced a relative decline in both its place within the national economy and the number of people working in the sector, some farmers have performed well in a competitive market, such as those specializing in Mediterranean products (fruit and vegetables). Development in the region of Asturias shows that the total number of cattle farms has been decreasing along with the proportion of farms producing milk compared to meat: in 1986 there were 45,950 farms with cattle, of which 65% produced milk, whereas in 2010 there were 18,736 farms, of which only 14% produced milk (Asturian Institute of Statistics 2011). There is no systematic overview of the number of *brañas* in use in Asturias; however, during fieldwork it became clear that there has been a marked reduction in the practice of summer farming – something we observed when visiting *brañas*, many of

them abandoned with crumbling buildings and pastures being invaded by bushes and trees due to lack of grazing. The term 'transhumance' in the Spanish setting is mostly associated with the long-distance transhumance – called *La Mesta* - between lowlands in southern Spain to mountain areas in the north, primarily involving sheep (López 2002).

Conceptual platform

The analysis in this study is guided by concepts and theoretical approaches focusing on farmers' value orientations or views on farming practices and the farming landscape, farming ideals or what symbolizes 'good farming' and 'the good farmer'.

. Embedded in transhumance resource use systems are value assessments, either explicit or implicit, regarding the available resources and the associated landscapes. Different types of landscape values can be identified. Jones (1993; 2009) has presented a typology of landscape values: (1) economic values (subsistence values, market values, and long-term economic value or 'utilitarian' ecological value); (2) non-economic identity values (including 'intrinsic' ecological value, scientific and educational values, and aesthetic and recreational values); (3) security values (e.g. defence-related values and demarcation values); and (4) 'negative' values (e.g. marshlands that present a hindrance to agrarian interests but have the potential to contribute if drained). The main motivation behind farming is economic: the production of food and fibre (Siebert et al. 2006; Gorton et al. 2008). However, studies show that farmers may value the landscape for more than economic reasons, for example appreciation of recreational values, or an orientation towards self-fulfilment (Rønningen 1999; Busck 2002; Bohnet et al. 2003; Boonstra et al. 2011).

People's value orientations towards nature, the environment or the landscape can be understood through the concepts of 'ecocentric' and 'anthropocentric' attitudes. Farmers are often seen to hold an anthropocentric orientation, focusing on profit and productivity and considering nature or landscapes as an economic resource, while recreationists and environmental officials are typically seen to subscribe to an ecocentric orientation focusing on the 'intrinsic value' of nature, biodiversity and 'unspoilt' landscapes (Kaltenborn & Bjerke 2002; Daugstad 2008). Such value orientations are often used to pinpoint differences in opinions between different stakeholders, typically farmers or local inhabitants as 'insiders' in

the community compared to tourists, managers or scientists as ‘outsiders’ (Busck 2002; Kianicka et al. 2006). However, a number of studies show value orientations crossing these categories (e.g. Daugstad 2008; Kianicka et al. 2010; Soliva et al. 2010; Vergunst 2012).

The values ascribed to farming and the farming lifestyle are closely linked to those given to farming landscapes. Farmers view their position as a farmer, the work done on the farm and the farming landscape in an interplay between individual judgements, motivation and possibilities, and the views of ‘others’ – whether fellow farmers, neighbours or a wider local community. One of the concepts used in the Asturian interview study was ‘the good farmer’ and what constitutes a good farmer. This concept has been introduced in a number of recent studies (e.g. Burton 2004; Burton et al. 2008; Sutherland & Darnhofer 2012; Vergunst 2012). A main finding in these studies is that, despite high uptake of agri-environmental measures over a number of years, no clear attitudinal shift in farmers’ approach to environmental or nature conservation concerns has been detected; farmers retain a productivist view of farming. Studies show this is the case in Norway (Rønningen 1999; Farstad 2003; Vedeld et al. 2003¹). Burton (2004; 2012) and Sutherland & Darnhofer (2012) find that the strongholds of productivist farming practices can largely be explained by social and cultural factors associated with shared views of the good farmer that are embedded in farming communities. In shifting their farming practices towards multi-functional agriculture and higher uptake of agri-environmental schemes, farmers risk moving outside the shared understanding of what is a good farmer and consequently may experience a dramatic change in social standing within their community. Skills and practices associated with good farming are a symbol of cultural capital. As an integral part of the farming system, summer farming practices are implicated in definitions of ‘good farming’.

Methods and material

Data presented in this study are derived from qualitative interviews conducted with practitioners in mountain communities in Spain and Norway.

Interviews in Asturias were undertaken by all three authors. The interviews were undertaken in Spanish. The Spanish co-authors of this article asked the questions in Spanish and

translated to English on the spot. The Norwegian co-author took notes and asked follow-up questions in English which were then translated to Spanish. After each interview all three authors went through the interview and made sure the notes were sufficient and cleared potential misunderstandings from the translation. Altogether 12 interviews with farmers or persons from farm households (involving 19 people) were conducted in May, June and November 2008. In four cases the interviews were with one person (a man in each case), while the other eight interviews were with couples, in some cases with two generations present. The youngest person interviewed was 30 years old while the oldest was in his 80s; most informants were in their 50s or 60s. Interviews were conducted with people in 12 villages (Fig. 1). The informants were selected on the basis of the Spanish co-authors' local knowledge of agrarian communities in the southern part of Asturias where people still practise transhumance. All interviews except one, which was conducted at a local café, took place at the farm – either inside or outside. Interviews lasted from one to two hours. On one occasion the interview was followed by a visit to the *brañas* with the farmer. However, most of the *brañas* were visited after the interview by the researchers in order to familiarize themselves with the places concerned.

<Fig. 1>

All interviews were semi-structured and followed an interview guide. The topics covered included: characteristics of the vertical agro-pastoral system (annual cycle, activities/tasks); the landscape and resource use (changes, future developments, motivation behind practices); and views or perceptions of the agro-pastoral system and practices (views in the local community, ideas of 'the good farmer').

The material from Norway consists of interviews covering the same topics as in the Spanish study, undertaken from 1999 to 2005 with summer farmers in the Forollhogna region, as part of several research projects on related topics (focusing on transhumant landscape practices, landscape management, and the status of summer farming) undertaken by the first author of this article (e.g. Bryn & Daugstad 2001; Daugstad & Sæter 2001; Daugstad 2005; Daugstad 2006a, b; Villa & Daugstad 2007). Forollhogna is one of the regions in interior southern Norway where summer farming is still practised. Altogether 16 qualitative interviews were undertaken involving 20 persons (two of the interviewees were interviewed twice during the period). The interviewees were mostly women and a few men, and included people in their

30s to people in their 70s. The interviews lasted from 1 to 2.5 hours and were undertaken either in the person's home or at the summer farm. All interviews were taped and transcribed. The interviews involve summer farmers in four villages (Figure 1). After 2005 the Forollhogna region has been visited repeatedly by the first author. Although no formal interviews have been undertaken since 2005, informal conversations have shown that no substantial changes in the summer farming system and practices have occurred since 2005. The existing publications form the basis of the Norwegian study together with re-analysis of the transcripts. The aim is not to undertake a systematic comparative study but to investigate practices, attitudes and views related to two basically similar systems of resource use at two different locations. The Norwegian material was not collected with the Spanish study in mind; however, fieldwork in the Spanish study was aligned to match the Norwegian material as closely as possible.

Transcripts and notes from all interviews have been subject to a qualitative content analysis with coding. According to Cope (2010), coding is a tool to 'boil down' large amounts of text data to key themes. This means the interview transcripts and notes have been read repeatedly in order to code sections of text. The first set of codes to structure and sort the text was descriptive or emic, often characterized by words and concepts used by the informants (Crang 2005; Cope 2010). The next set of codes was analytical or etic. Key themes from the first coding rounds were reviewed and led to new codes reflecting structures and patterns in the material linked to the theoretical concepts informing the study (Cope 2010; Hesse-Biber & Leavy 2011; Thagaard 2011).

Results

Results from the fieldwork will be presented as follows: first, a description of the transhumance system in the two areas and the pattern of movement between altitudinal zones; second, farmers' perceptions and attitudes towards changes in the system and the landscape; and, finally, opinions and perceptions regarding 'the good farmer' and 'good farming practices'.

The systems of summer farming in Asturias and Forollhogna

In the *brañeo* system in Spain, different altitudes are used at different times of the year. From October–November to March–April, animals are kept at the farm at village level (indoors at night, outdoors during the day weather allowing). Often the first move, to pastures just outside the village and at a similar altitude, occurs in March or April. Here, milking is performed either in the meadows or in the *cuadra* (a shed for animals) at the permanent farm. These spring meadows are normally used until early May. Next, animals are moved to a meso-level further away from the permanent farm. This consists of pasture lands and in some cases *cuadras*. For farms without meso-level pastures, animals are moved directly to the highlands in early May. Animals normally remain at the meso-level for a number of weeks from early May. While pastures at the meso-level sustain the animals over these weeks, the pastures are left to grow following the animals' departure until July–August, when they are harvested for hay. The highest level of the farm is normally occupied from early June until August–October, but may be occupied from early May if the farm does not have a meso-level.

<Fig. 2>

Pastures at the highest level of the farm, often called *la braña*, *la majada* or *el puerto*, are normally used by grazing animals and seldom used for hay production. Built structures for animals include simple, circular fenced structures for calves during the night to protect them from wolves and other wild animals, and small *cuadras* for calves and cows. In some cases, the *cuadra* may house both the livestock and the cowherder, but in other cases separate houses exist for animals and humans (Figure 2). While in the traditional *brañeo* system, milking took place at the highest level, nowadays most farmers report that 'dry cows' are sent to the highest level, meaning that no milking takes place there. In the traditional system, the cowherder or *brañeiro* would go to the *braña* at the end of the day in order to milk the cows. Historically, attending the *brañas* in Asturias was a responsibility evenly shared between males and females. The differences in altitude between the village, the meso-level and the highest levels varies between villages. For the farms studied in this research, village elevations ranged from 650 m to 850 m a.s.l., meso-levels from 700 m to 1400 m and the highest levels from 800 m to 1700 m.

In the Forollhogna area of Norway, a similar movement between different altitudes has been historically practised, although today in the majority of cases farmers use just one summer farm location. In the past, farmers first moved animals to a summer farm relatively close to

the permanent farm, where the pastures were ready for grazing in early June. This first location was called the spring farm (*vårseter*). In addition to a cowshed, it was equipped with a small house for the cowherder to stay in. In some cases there was also a small enclosure outside the cowshed for collecting the animals. This fenced area both served as a pasture (in addition to grazing grounds in the nearby area where the cattle roamed freely) and was mowed for fodder production after the livestock were moved out. In the majority of cases, the *vårseter* was not far from the permanent farm (normally 3–4 km) and the milk was carried down once a day by the herder; hence there was rarely any production of butter and cheese at this location. Some farmers still mow the *vårseter*. Some farmers have renovated the dwelling house and use it as a leisure-time cabin, while others have abandoned the *vårseter*, and the open land has become overgrown and the buildings are decaying. In contrast to the Asturian system, summer farming in Norway (as in Sweden) has been the responsibility of women in the household, and the *seter* landscape has been characterized as a landscape controlled and run by women (Daugstad 1999; 2006b; Eriksson 2011).

<Fig. 3>

When the system of multiple summer farms was practised, the second move, occurring at the end of June or early to mid-July (depending on ecological constraints), was to the ‘long’ summer farm (*langseter*) or the mountain summer farm (*fjellseter*) (Figure 3). This *seter* was often located just within the upper forest limit, which in inland areas such as Forollhogna could be 800–900 m a.s.l. (in contrast to the permanent farms, which are located between 400 and 600 m a.s.l.). The walking distance from the permanent farm to the *langseter* ranged between 10 and 20 km, although elsewhere it could be much longer. Compared to the *vårseter*, the *langseter* had a more solidly built dwelling for the person attending the animals to live in. Indoor facilities were also needed for the processing of milk and for the storage of butter and cheese, as the long distance to the permanent farm demanded full processing of all milk at the *langseter*. At the *langseter* there was a fenced meadow close to the buildings, which was mowed when not grazed. At the present time, the main pattern is that those farmers who still practise summer farming use the *langseter*. Many of the dwelling houses as well as the outbuildings have been modernized. Some have electricity or at least have a diesel engine providing power for the milking machine. The milk is transported by lorry to the nearest dairy three times a week. Processing of milk to cheese is done only on rare occasions – mostly for household use.

A third move to what was called the autumn farm or *høstseter* has been practised in some parts of Norway. This involved a displacement back to lower altitudes in September and the stay lasted as long as at the *høstseter* provided grazing. For some farms, the *høstseter* was a third *seter* location (in addition to the *vårseter* and the *ffjellseter*). Otherwise it could be the same location as used in spring (Daugstad 2005). The latter is the case in the Forollhogna area.

A changing system and a changing landscape

Structural changes to agricultural policies in Spain since 2000 have seen farmers increase the size of their flocks to adapt to falling meat prices and increased costs related to farming (for example, the price of chemical fertilizer, and new hygienic requirements in animal husbandry). As a result of increased flock sizes, one of the main challenges facing farmers who practise transhumance in Asturias is that they own insufficient grazing and hay production land for their animals' needs. Many of the farmers we talked with currently rent land in neighbouring villages for pasture as well as fodder. Farmers reported that the price of rented land was relatively high due to competition. Some farmers reported that they bought hay because of lack of labour rather than lack of land for fodder production. This was especially the case for single farmers who did not have access to family labour to help with hay making, when farmers reported having to buy hay even if it was uneconomical. Another notable change to transhumance practice reported is that the journey to the *braña* is now by vehicle rather than walking; hence the cowherder drives back and forth from the village and does not stay at the *braña*. A second change is that mixed milk and meat production has given way to primarily meat production. Third, informants reported that subsidies are now a major part of their income. While historically income was derived from the profit of what was sold, now subsidies keep the system running in many areas.

We found that a number of motives existed for the continuance of transhumance practices in Asturias. All farmers interviewed suggested that the agro-pastoral system with altitudinal moves was the only possible and sensible way to run agriculture in the region. Some said they were farming because it was their only option, either due to lack of formal education needed to qualify for other jobs or because it was the only thing they could do to stay in the community and not commute. Others stated that being a farmer was what they wanted to do,

and was a lifestyle they liked. Some felt an obligation to keep up the family tradition of running the farm.

In the Forollhogna area, the same systemic changes were reported, with larger flocks, fodder production concentrated to the most fertile and easy accessible fields, and managing the *seters* by car. The phrase ‘turbo milk maid’ was used to illustrate the modern herder driving to the *seter* in the morning to do the milking, then going back to the village to work either on the farm or to undertake off-farm work, then returning in time for the evening milking at the *seter*. The *seter* was said to be a work station rather than a temporary settlement. In particular, older women complained about this changing attitude towards time and the stress associated with farming during the *seter* season; as one woman said: ‘With the turbo generation the joint coffee break when resting after morning milking is gone’. This statement underlines the loss of both the social value of the system and the sense of community among the women in the *seter* areas. The movement of cattle to and from the *seter* is generally undertaken by lorry. However, one of the summer farmers, who still walks to the *seter* with the cows, stated:

People ask me why I do not take the cows to the *seter* by lorry, then the whole thing would not take more than one hour. The walk to the *seter* takes five and a half hours and the journey back home one hour less. My answer is that I need to uphold the tradition of moving by foot. The cows must learn that this is the way to enter the *seter* landscape.

This quote seems to indicate a priority given to values such as tradition and a form of ‘nature ethics’ rather than economic efficiency. This aspect does not come out of the interviews in Asturias.

The Forollhogna summer farmers are motivated to continue this practice first and foremost because summer farming, as a system of access to pastures in the mountains, is of vital importance in areas where this is the only way to practise animal husbandry due to topography, altitude, and scarcity of suitable land for cultivation. This is documented for Norwegian summer farmers in general (Daugstad 2006b). It can be interpreted as primarily an economic motivation but is, in addition, tied to what has been found to be a secondary motivation: to keep up traditions and run the farm with the *seters* as it has been done by generations before. It was hard for many farmers to picture themselves as the one ‘breaking

the tradition'. Further, well-being for animals and people was a concern. The well-being of animals has an economic side as healthy cows mean fewer bills from the vet. The well-being for humans was reported as being that staying at the *seter* represents doing something different and a shift in the day-to-day routine of the farm. For some there is a well-being element in the possibility of taking time off and going away for summer holidays during the *seter* season. The annual *seter* payment of 35,000 NOK (c.6000 USD) in the Forollhogna area can be used in this case to hire a person to take care of the animals at the *seter*.

Changes to the natural environment of the investigated summer farms affect transhumance practices. In Asturias, most farmers mentioned the invasion of open land by bushes and trees that resulted from less intensive use of the landscape. This effect was most detectable at the meso-level and around the villages while at the highest *braña* level the landscape remained relatively unchanged. For some farmers this change in the landscape at the village and meso-level was acknowledged as a problem because the overgrowing of fields by forest represented a loss of grazing grounds. This forced farmers to take the cows to the highest level earlier than before, but here the grass was often not yet fully grown, meaning its nutrition value was reduced. Some described changing land use by referring to the introduction of tractors for mowing and hay transport. This affected the division between hay fields and pasture lands; the areas that could be managed and accessed by tractor were where hay production took place, while the rest was used for pasture, which mainly meant less intensive use than mowing. Hence they saw an emerging regrowth of bushes on these areas.

Overgrowth of open pasture or mowing land by bushes and trees was also a major concern for the summer farmers in the Forollhogna area. They often described landscape change as 'loss of the view' and felt that the *seter* dwellings were 'drowning' in birch forest. This was problematized in relation to economic as well as non-economic values. One of the female summer farmers had for several years worked to reverse the status of overgrown pastures. She started out by cutting down trees and bushes, but for the first 2–3 years after this the animals, preferring other areas, needed to be forced (by fencing) to start grazing on the cleared land. However, after the initial years, the grazing quality had increased on the cleared land and the animals chose this re-created pasture land voluntarily. This activity was motivated by an economic concern to have good and nutritious pastures around the *seter*. Another economic concern was expressed by those who had developed *seter* tourism (accommodation and food, guided tours, etc.). Such farmers feared that the attraction of the *seter* landscape would be

reduced if overgrowth increased and the landscape became less heterogeneous. Non-economic values threatened by forestation of the *seter* landscape were expressed through fears that the landscape would be less ‘walkable’ (due to overgrown trails), and that heritage aspects, such as traces of old land-use patterns, built structures and intangible heritage – along with accounts of hay harvesting – would be lost.

Views regarding changes to the system and the landscape also had to do with future prospects of the transhumance practice. In Asturias, the general outlook of farmers was bleak due to a number of factors such as expected severe cutbacks in subsidies, decreasing profitability due to high costs of input factors and low prices for output, lack of support for farming from public bodies, problems of successors to take over holdings, and depopulation of villages leading to reduced services and infrastructure. Further, farmers were not convinced that alternative sources of income, such as farm-based tourism, would generate sufficient returns to be viable enterprises. For Norwegian farmers, the outlook was in general less negative than in Asturias. However, farmers underlined that challenges came from farming in general although not summer farming in particular. As one informant said, ‘the major obstacle for future *seter* farming is to be able to afford to keep the animals during the winter’. In other words, the summer months in the *seter* landscape are when the system is ‘at its best’ in terms of profitability and lifestyle gains for people as well as animals, while the long winter is when ‘reality hits you’ and the balance between expenses and income becomes challenging.

Changes and attitudes linked to protection of the natural environment

Both study areas are close to or included in protected areas. Hence, views regarding nature protection, rules and regulations, and changes or benefits related to the protection status were addressed during the interviews. In Asturias some of the farmers lived close to a regional park, Parque de Natural de Somiedo, where resource use (for example, grazing and the cutting of trees) is regulated. However, farmers in Asturias receive extra subsidies if they graze their flocks inside a protected area as grazing assists in maintaining the traditional character of the semi-open forested landscape. Similarly, the farms examined in the Norwegian case study were located close to the Forollhogna National Park. In this case, the mountain plateau was part of the national park while the adjoining *seter* areas surrounding the national park were designated as protected landscapes.

Almost unanimously farmers interviewed in Asturias felt that priority was given to the ‘wild’ landscape and wild animals, and that farming and animal husbandry was seen as ‘interference’ with wild nature. Several talked about how they were unable to manage the forest any longer because it was seen as habitat for wild animals. In this way, the forest was not ‘cleaned’, as they phrased it, dead material could not be taken out and, as a result, the risk of forest fires increased. One farmer suggested that it was possible to have both wild animals and farming, but in order to do so nature protection officers needed to communicate with the farming community. For example, he pointed to local knowledge about how certain wild animals behave, which he felt should be acknowledged and used by the park administration. In general, views towards the protected area were negative. However, one of the farmers pointed out that farming in a protected area meant more subsidies and he thus saw it as a positive thing.

The topic of nature protection in Forollhogna was commented on in terms of rules and regulations, landscape change, and the human dimension in nature. The Forollhogna *seter* farmers express a view commonly noted in other studies: annoyance over rules and regulations associated with protection status. Farmers argued that locals had managed the area for generations, but when the authorities decided the area was worthy of environmental protection farmers were not given any role in managing the protected landscape. A somewhat different view came from a farmer who saw herself as a caretaker of values for Norwegian society, particularly the value of summer farming within the cultural landscape. For this farmer, giving the landscape status as a national park or protected landscape was seen as absolutely appropriate. However, in her view, the role of the *seter* farmers for maintaining common values needed to be acknowledged and measures implemented in order to keep the *seter* system running.

‘The good farmer’

In the Spanish case, farmers were explicitly asked if the idea of ‘the good farmer’ existed among farmers or within the local village and, if so, what type of attitudes, practices and materiality were seen to represent ‘good farming’. While such questions were not specifically asked in interviews with Norwegian farmers, the topic emerged indirectly in discussions concerning landscape values, future prospects for farming, and the perceived the status of farming in general and summer farming in particular.

In Asturias, some of the farmers suggested that farming was seen by non-farmers as a lowly occupation and that people outside the farming community viewed farmers as inferior. For example, one of the informants spoke of a neighbour who grew up in the village but moved to the city and now used the neighbouring house as a holiday home. The farmer suggested that this neighbour, despite knowing how ‘the rural works’, complained about the smell of manure. Similar examples were given by farmers regarding both ex-locals and tourists who appreciated a well-kept landscape but failed to acknowledge the link between active farming and landscape maintenance.

When asked about how the standard for good farming was set and if comments from others were important, the farmers in Asturias mentioned a number of things. Negative comments about farming came mostly from elderly people who were familiar with a different system of farming. This was expressed, for example, in relation to the fact that when flocks were smaller, each animal got more attention, while in the contemporary large-scale system farming was said to be done ‘in a modern and easy way’, with negative connotations. Another farmer suggested that elderly people were likely to comment on ‘fuzzy fields’ (fields no longer regularly mown and invading bushes) and overgrown roadsides due to less mowing. In contrast, younger farmers saw these aspects as less problematical. They were more likely to judge the quality of the farmer by three factors. The first was the appearance and health of the cows: whether the cows were clean, well-fed and of good breed. As one farmer said: ‘A good farmer should be worried when a cow is sick’. This quality of being recognized as a good farmer led one of the youngest farmers interviewed to install a camera in the cowshed so that when a cow calved during the night he could keep track of it from his house. Second, the quality of the farmer was judged by how much money the farm generated and, third, by the state of the farm’s fields. This relates to fields being ‘clean’ (mowed at the correct time, and kept free from bushes), with well-maintained channels for irrigation, and well-kept fences and trails.

For the *seter* farmers in Forollhogna, a number of aspects of farming practice were seen as important in what can be interpreted as defining ‘the good farmer’. First was keeping the landscape in its traditional form and preventing grazing lands and hay fields from becoming overgrown. This was closely tied to a farmer’s role as a temporary custodian or caretaker of resources used by the same family for generations. In addition to maintaining the landscape

and upholding tradition, proper care of animals was seen as crucial in differentiating a good from a bad farmer. For example, one of the *seter* farmers showed special care for the cows and it was the animals' needs that were decisive for how a new cowshed at the *seter* was organized:

We wanted to keep the structure of the new cowshed like the old one when we had to replace it. The cubicles were located at exactly the same place. The first time the 'chief' cow was to enter the building she stopped and gazed at the electric lights in the ceiling but then found her way to her regular cubicle – as if after some consideration she said: 'This is OK!'.

As in Asturias, the structural changes in farming in Norway mean fewer hours are available to attend animals, and this was seen as a problem by the Forollhogna farmers. Also similar to the findings from Asturias farmers, fringe areas along fences or roads which are not mowed, making the landscape look 'less used' and untidy, were considered symptomatic of 'the bad farmer'.

Discussion

Despite their differing geographical locations and overarching political frameworks, there are a striking number of similarities between the transhumance systems examined in this research. These similarities may primarily reflect adaptations of the agro-pastoral systems of *seterbruk* and *brañeo* to the ecological and climatic conditions of mountain farming. Both systems are indicative of practices and principles that follow a certain logic independent of latitude. In both Asturias and Forollhogna, the main motivation for maintaining the transhumance system is that, as long as people want to stay in farming, use of mountain pastures and resources in the outfields is necessary. In other words, there is a basic economic orientation underlying both systems. Especially in Asturias, some of the informants suggested that farming was their only option – either due to lack of education or lack of alternative employment opportunities in their local community. However, upholding tradition was an additional motive for both Asturian and Forollhogna farmers.

General structural changes in farming have clearly affected both areas. However, despite studies documenting European farmers' productivist orientation (Siebert et al. 2006; Gorton et al. 2008), the 'pure profit mentality' of productivist farming is not found in either Forollhogna or Asturias. In Asturias, even the most 'modern' farmer who has increased the size of his flock states that 'a good farmer should be worried when a cow is sick', and this worry is not only due to potential economic loss, but also to a general care ethic concerning the animals. We do not know if this is a concern more present in transhumance systems than general animal husbandry. As suggested by Villa & Daugstad (2007) with reference to Norwegian summer farmers, transhumance farmers are a minority within Norwegian farming and a certain self-selection may have taken place, leaving only the most dedicated farmers. The *seter* farmers in Norway do not fit into the productivist ideal since they are small-scale, their mode of production is labour-demanding, and running the *seter* has an element of lifestyle choice more than profit maximization. However, elements of the productivist ideal, such as well looked-after fields and healthy animals, were also seen as important for farmers interviewed in this study, serving as an indicator of quality and displaying how to be a 'good farmer'. Yet statements from some of the farmers that running the *brañeo* system is due to lack of other opportunities undermines this argument in Asturias.

The issue of 'good farming' is an acknowledged concern for farmers in both areas and relates to fields as well as livestock. Farmers see the cultivation and use of the landscape as important to maintain the high value of the grazing grounds, while in Asturias removing dead branches in the forest is important for fire prevention. Healthy cows are important for avoiding high veterinary costs. These concerns can be interpreted as stemming from an economic focus, or they can be interpreted as part of a 'package' of wider interlinked concerns. For example, keeping an open landscape free from invading forests is a way to secure sufficient quality of grass and, hence, keep up milk production, but at the same time it keeps the landscape passable and maintains the open view for the summer farmers. Several of the values ascribed to landscape (Jones 1993; 2009) may be seen as interlinked, in this case economic, recreation and identity values. This serves as a reminder that one should be careful in ascribing some actions or practices to an anthropocentric motivation or to an ecocentric motivation (Kaltenborn & Bjerke 2002). From the sample of summer farmers in this study, both orientations are evident among the same group.

Asturian farmers were particularly sensitive to how their farming practices were viewed by others. Comments from the community concerning fields and animals differed among different age groups. Comments from older people related to ‘fuzzy fields’ and roadsides not being mowed, while younger people commented on the health and productivity of cows. Roadsides were left unmown because of new equipment and machinery designed for rational large-scale mowing, which were unable to handle the smaller roadside areas. Elderly farmers commented this in relation to the older system of using a scythe, which made small-scale area maintenance possible. Despite this not being a major finding in this study, it may be an interesting point to pursue in further studies. The comments from tourists and owners of holiday homes in Asturias shows how their approach to rural life and landscape consumption is fundamentally different from the production approach to the rural landscape held by the farmer. This illustrates the contrast between a production and a consumption approach to rurality (Cloke 2003).

Studies of farmers elsewhere show that bush encroachment is a major concern and considered a negative trend (e.g. Bohnet et al. 2003; Calvo-Iglesias et al. 2006; Boonstra et al. 2011). In both of the locations studied, the presence of national or regional parks is a common concern for farmers. Park rules and regulations are seen as interfering with farming practices and priorities, and are associated with feelings that farming is considered as less important than highly valued ‘wild nature’ and that peripheral communities are of less importance than central communities. This centre–periphery or national–local dimension is also found in other studies where ‘periphery’ and the ‘local’ are related to powerless (Shucksmith & Rønningen 2011). Such opinions are more strongly present in Asturias than in Forollhogna.

In relation to nature protection, the Norwegian *seter* farmers interviewed seem less pessimistic about the future for their type of farming than their Spanish colleagues. This may be influenced by policies and economic conditions, such as special grants in Norway, but it may also be affected by a generally positive rating of the heritage and cultural landscape of summer farming among the general public in Norway that is not found in Spain. People’s views are formed in confrontation and interplay between their own opinions and the views and opinions of others (‘others’ in this context being policies as well as persons).

Conclusion

The first goals of this study was to explore the characteristics of the two examples of transhumance systems in respectively Forollhogna in Norway and Asturias in Spain. The study found that the two systems share certain basic similarities. The transhumant move between altitudinal levels through the grazing season is a characteristic of the pastoral system in both areas; transhumance is still practised in both locations, although in a simplified form. The motivation behind keeping up summer farming was the lack of fodder resources in the lowland areas close to the farm combined with access to grazing grounds in the mountains. In order to stay in animal husbandry, this was the only way to use the resources. In other words, an economic motivation underlies this system of farming.

The second goal was to investigate how farmers view their practices and the landscape of summer farming in terms of what changes are described and if the changes are seen as positive or negative, and also how they see the practice of summer farming in relation to nature protection. It is evident that agrarian restructuring and increased pressure have had an impact on both areas. The landscape changes can be described as a simplification of the landscape, where previously open land not suitable for tractors and large machinery is abandoned and reverts to forest. The landscape appears less tidy and more 'fuzzy' when roadsides are not mowed. Overgrowing by bushes reduces the economic value of the land in addition to its heritage, identity and recreational values. This was especially expressed in the Norwegian interviews. Landscape changes have also occurred in the protected areas where forests, which were previously managed by farmers through collection of leafy fodder or removal of dead wood to prevent fire, are now managed as 'nature'. In particular, the Asturian farmers commented on what they saw as the contradiction when areas used for a long time for traditional activities such as fodder collection and grazing grounds were now protected and managed as 'wild nature', where these traditional activities were not deemed appropriate. Restrictions on fodder collection and grazing result in the landscape becoming less open, and the landscape character targeted by protection disappears.

The third goal was to investigate whether the idea of 'the good farmer' or 'good farming' could be detected. An underlying goal was to explore specific value orientations in farmers' descriptions and elaborations. It was found that the farmers in both areas relate to ideas of 'good farming' regarding both fields and livestock; tidy, well-kept fields and productive, healthy livestock are indicative of 'the good farmer'. Similar perceptions are held by other farmers and people in the community. There is a higher tendency for Asturian farmers to be

‘trapped’ in a productivist regime than Forollhogna farmers. For Asturian farmers, there was a noticeable feeling that farming and farming heritage were looked down upon in Spanish society. In Norway, the explicit focus on the heritage values of summer farming, combined with good agri-environmental support systems, differs from the situation in Spain. Summer farming in Norway falls within a national definition of ‘good farming’ due to the heritage and environmental aspects of the system.

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Figure captions

<Fig. 1: Topographic map indicating the location of the communities in Norway and Spain where interviews were undertaken (Source: Department of Geography, Norwegian University of Science and Technology)>

<Fig. 2: Braña de L.lagueces, Cuevas, Belmonte de Miranda, Asturias, 2008 (Photo: Courtesy of M. Fernández Mier)>

<Fig. 3: The Spellmovollen seter, Os municipality, 2007 (Photo: Courtesy of K. Daugstad)>

ⁱ Vedeld, P., Krogh, E. & Vatn, A. 2003. Good agronomy: Social institutions among Norwegian farmers and public sector governance. Paper for the XX Congress of the European Society for Rural Sociology, August 18-22, Sligo, Ireland.