The Contribution of Wasdale Farming to Social and Cultural Capital of Wasdale and the Lake District

On Behalf of: West Lakeland CIC

Authors: L Mansfield (Environmentors Ltd) and O Morgan (Researcher, University of Cumbria)

ENVIRONMENTORS

CENTRE FOR NATIONAL PARKS & PROTECTED AREAS

University of CUMBRIA

Acknowledgements

The authors would like to take this opportunity to thank the following farmers in this study for giving their time and knowledge freely:

- David Dimond, Harrow Head
- David Hall, High Thisleton
- Micheal Longworth, Wasdale Head Hall
- Andrew Lopez, Row Head Farm
- Julius Manduell, Church Stile
- Paul Naylor, Bowderdale Farm
- David Nesbitt, Wood How
- David Porter, Easthwaite Farm
- Andrew Race, Burnthwaite
- Duncan Shuttleworth, Ghyll Farm
- Adrian Simper. Yew Tree Farm

We would also like to thank: Helen Race for helping with the Wasdale Show visitor surveys and answering lots of daft questions; Amanda Carson for her help with the analysis of the Shepherds Guides; advice and support from Jamie Lund and Robin Witchell of the National Trust; David Morgan for providing additional photographs and Angus Winchester for his historical knowledge.

We would like to thank the Society for Landscape Studies for permission to use the images on pages 27 and 28 taken from Winchester AJL (2004) 'Moorland Forests of Medieval England' Chapter 3 in: Whyte ID & Winchester AJL '*Society, Landscape and Environment in Upland Britain'* Supplementary Series 2. We would like to thank Edinburgh University Press for permission to use the image on page 29.

Finally, we would like to thank the West Lakeland CIC for this opportunity.

Authorship:

Lois Mansfield – Wasdale Show visit, main report, sections 1 to 8, 12 and 13

Owen Morgan – Farm visits, report section 9 to 11, 12 and 13, report review.

Executive Summary

Introduction

As the Lake District Nomination Document (p19) for World Heritage Status states:

> *'Wasdale is one of the best known valleys in the English Lake District as a result of its spectacular landscape of lake, screes and surrounding high mountains which are the basis for the design of the official logo of the Lake District National Park. Its landscape character has been shaped by centuries of agro-pastoral farming. The valley floor at Wasdale Head, with its organic pattern of small, thick-walled inbye fields is an iconic feature of the English Lake District.*
>
> *This is one of the key valleys in the Lake District for Herdwick farming. The Wasdale Show and Shepherds' Meet is one of the principal events of the Herdwick farmers' year. Some of the farm houses in the valley date from the 17th century but many others date from the 18th and 19th centuries. Their landscape disposition clearly follows that of the medieval period, and this is especially apparent at Wasdale Head where four former medieval vaccaries were later subdivided into a number of separate tenements.'*

For well over a thousand years the landscape of Wasdale has been shaped by the activities of agro-pastoral farmers, their families and communities. This relationship between the people of Wasdale and their valley is referred to as a socio-ecological system. Here the actions of people (human capital) have shaped an ecology and habitats (natural capital) and in doing so, these farming communities have created a unique farming system combining tangible structures, such as drystone walls and stone barns, with intangible processes, examples being hefting and gathering (cultural capital). A critical element of this system is the way in which Wasdale farmers over the generations have and still collaborate, network and organise themselves (social capital) to manage their resources and livestock through processes such as hefting, gathering and commoning.

Aims

This report focuses on demonstrating the value of cultural and social capital created and maintained by farmers in Wasdale. It aims are to:

1. Introduce how the concepts of socio-ecological systems, capitals and their attributes interrelate in hill farming systems
2. Outline the rich cultural heritage, archaeology and history of Wasdale's agro-pastoral system and landscape.
3. Consider recent agricultural trends and the drivers shaping these.
4. Explore, in depth, the cultural and social capital of the Wasdale farming community.
5. Demonstrate the relationships between cultural, social and natural capital
6. Suggest solutions to some of the management challenges undermining the continuation of the agropastoral system in Wasdale

Methodology

Primary data was provided by the farmers themselves and through a visitors survey at the 2023 Wasdale show. Secondary data were gathered and synthesised from grey and published literature, including six editions of the Shepherds guide, internet sources and materials from Cumbria Records Centre.

Findings

Our synthesis reveals that Wasdale hill farming produces a wide range of cultural and social capital which not only underpins the natural capital, but provides a rich cultural heritage of its own, supporting a diversity of recreational activities. Particularly important features include:

- ***Cultural heritage*** - The Wasdale farming community are guardians and stewards of a unique socioecological system and it's related cultural landscape formed over the last three thousand years and duly recognised through WHS inscription. There is evidence to suggest that this heritage is under threat from a decline in hill farming which could reach a tipping point in the next twenty years, possibly sooner due to arrange of factors including: retirement of elder farmers; tenancy changes; farm management processes, and stock reductions.

- ***Tangible Cultural Capital*** – the Wasdale farming system produces a diverse package which includes: drystone walls, hedges and hedgebanks (kests), hefts, shepherds meets, the Wasdale Show, Shepherds Guide entries and recreational opportunities

- ***Intangible Cultural Capital*** - The exploration of Intangible Cultural Capitals (ICC) within Wasdale community reveals a deeply ingrained sense of identity and connection to the land, anchored by traditional practices and values. The ICCs identified, including the perceived rightness of the farming system for the landscape, custodianship of the land, self-reliance, community support, dedication to hard work, intergenerational knowledge transfer, and the centrality of livestock, collectively illustrate the resilience and cohesion within these communities. Wasdale farmers exhibit a tradition of collaborative work, balanced with individuality and a strong sense of community, while their profound attachment to livestock underscores the cultural significance embedded in their way of life. Overall, the hill farming culture emerges as a complex and interconnected system of beliefs, practices, and values, sustaining their livelihoods and connection to the fell landscape.

- ***Social Capital*** - The study illuminates the pivotal role of social capital in the cohesion and resilience of the Wasdale farming community. Trust, reciprocity, and adherence to shared norms form the bedrock of social interactions, facilitating cooperation and mutual support among community members. Key organizations and events, such as the Nether Wasdale Common Association and the Wasdale Show, serve as crucial platforms for community engagement and collaboration. However, challenges exist, particularly concerning the impact of certain external factors on the valley's resources and economy. By leveraging and strengthening existing social networks, stakeholders can address these challenges and foster a more sustainable and vibrant community in Wasdale.

- ***Recreation and Infrastructure*** – recreational opportunities created by the farmed landscape include walking, cycling and fell running. Outdoor clubs and small businesses have developed benefitting from the farmed cultural landscape. Associated water-based

activities derived from visitors seeking low-impact landscape experiences include: wild swimming, canoeing, kayaking, paddleboarding, rowing boats. Challenges created by increasingly excessive visitor numbers including: congestion, antisocial behaviour, litter, human waste, poor dog behaviour, lack of countryside awareness, and interruption to practical farm management.

Challenges

Unfortunately, a range of contemporary drivers are creating additional tensions which have begun to distort the socioecological system of Wasdale's farmed cultural landscape, most notably a perception that raising productivity will be of benefit to farm businesses. In doing so, ill-conceived economics are distorting the farming system and impacting negatively on the cultural heritage of Wasdale, as well as threatening farm viability. At the same time, inappropriate agri-environmental policies are undermining the functionality of the farming system through a lack of understanding of how this socioecological system works. This in turn threatens natural capital resilience and the landscape visitors come to enjoy. Concurrent increased visitor pressure is impacting on the very experience people are seeking, as well impacting negatively on the pragmatics of daily farm management.

Recommendations

From our observations, analysis and synthesis of the social and cultural capital generated by the Wasdale farming community and the drivers and trends evolving we suggest TEN recommendations.

R1 – Develop better support structures for the continuation of hill farming: using well-evidenced local contemporary and retrospective data to integrate natural, social and cultural capital goals to enable dual targets of outcome-led environmental objectives and farm business viability.

R2 - Complete a full valley cultural heritage survey: employing the methodology used by the National Trust Historic Landscape Surveys, conduct archaeological and historic surveys on the private farms which formed this research. This would give a fuller picture of the cultural heritage of Wasdale.

R3 - Preserve Socio-Cultural Traditions: Implement measures to support and promote socio-cultural traditions such as sheep showing and shepherd's meets, which play a vital role in fostering community cohesion and preserving cultural heritage. This could include a corporate Whole Valley sponsorship seeking green and cultural credentials. Other options include logistical support for local events and initiatives aimed at engaging farmers, particularly younger generations, in these traditions. Potentially looking for additional funding sources to pay increased prize money for livestock showing, making the activity more economically attractive for farmers, covering the cost of time spent away from farm.

R4 - Support for Inter-generational Knowledge Transfer: Implement programs to facilitate the transfer of traditional knowledge and skills from older generations to younger ones within hill farming communities. This could include mentorship programs, apprenticeships, and educational initiatives focused on agricultural practices and rural skills. Work directly with the new LANSS and

Cumbria Chamber of Commerce and engage the older farmers nearing retirement in Wasdale, allowing knowledge transfer to younger farmers before it is lost.

R5 - Produce a 'multiple capitals account' for Wasdale: calculate a financial account for all capitals produced by farming in Wasdale to include: natural, human, social, cultural and financial. This would enable a better grasp of the Total Economic Value produced by the Wasdale farming community to present to potential corporate sponsors and as evidence for government bodies of the importance of this socioecological system.

R6 - Promote Radical Sustainable Tourism: Work with local authorities and tourism organisations to promote sustainable tourism practices that minimise negative impacts on farm operations and the surrounding environment. This could involve the production of a specific plan for Wasdale and include initiatives such as visitor education programs, responsible camping guidelines, and infrastructure improvements to alleviate congestion in heavily visited areas. In Wasdale specifically, this should involve a shuttle bus from Nether Wasdale to Wasdale Head, reducing vehicles especially at peak times to include 'early bird' and 'night owl' services.

R7 - Promoting Sustainable Economic Development: Support sustainable economic development initiatives that benefit both hill farming communities and local businesses. Encourage diversification or 'added value' strategies that complement traditional farming practices and contribute to the long-term resilience and prosperity of the local economy (see R4 and R5).

R8 - Engaging with External Organisations: Encourage engagement and collaboration with external organisations, such as the National Trust and local businesses, to lever resources and expertise for the benefit of hill farming communities. Facilitate dialogue and partnership-building efforts to address shared concerns and explore opportunities for mutual support and collaboration. Form a joint tourism/recreation/ farming Wasdale partnership.

R9 - Adaptive Management Plans: Develop adaptive management plans in collaboration with key stakeholders, namely Natural England, National Trust and LNDPA to address the specific challenges faced by traditional hefts in different parts of the valley. These plans should incorporate flexibility to accommodate local variations and changing environmental conditions while aiming to maintain the integrity of traditional farming practices. By fostering a better understanding of these issues, stakeholders can make more informed decisions that support the sustainability of upland ecosystems and communities.

R10 - Research and Documentation: Support further research and documentation efforts to better understand and appreciate the complexities of hill farming culture. This could include funding for ethnographic studies, academic research projects, and community-based research initiatives aimed at uncovering additional layers of intangible cultural heritage. Encourage programs and initiatives aimed at preserving and promoting the intangible cultural capitals (ICC) identified in hill farming communities. This could involve documenting traditional practices, beliefs, and values through oral histories, written records, and multimedia platforms.

Lois Mansfield & Owen Morgan, February 12th 2024

Contents

List of Figures

List of Tables

1. Introduction

For well over a thousand years the upland environments of Britain have been shaped by the activities of agro-pastoral farmers, their families and their communities (Winchester, 2000; Mansfield, 2011). This relationship between people and place is referred to as a socio-ecological system, where the actions of people (human capital) shape the ecology and habitats (natural capital), as much as the environmental conditions control the land use choices farmers make. In doing so, these farming communities have created a unique farming system combining tangible structures, such as drystone walls and stone barns, with intangible processes, examples being hefting and gathering (cultural capital). A critical element of this system is the way in which people collaborate, network and organise themselves (social capital) to manage their resources and livestock through processes such as commoning.

Rural West Cumbria and it's related communities, on the western extremities of the Lake District of northern England, is one such place where human, social, cultural and natural capital come together to maintain and sustain this socio-ecological system through the application of traditional and local agro-pastoral knowledge.

This report, commissioned by the West Lakeland Farmer Led Nature Recovery CIC (hereon referred to as West Lakeland CIC) , explores specifically, the contribution of farming to cultural and social capital, using Wasdale and its farming communities as a case study. In doing so, we aim to demonstrate the interconnectedness between society and ecology in agro-pastoral systems like Wasdale.

To address these aims, this report will:

1. Introduce how the concepts of socio-ecological systems, capitals and their attributes interrelate in hill farming systems
2. Outline the rich cultural heritage, archaeology and history of Wasdale's agro-pastoral system and landscape.
3. Consider recent agricultural trends and the drivers shaping these.
4. Explore, in depth, the cultural and social capital of the Wasdale farming community.
5. Demonstrate the relationships between cultural, social and natural capital
6. Suggest solutions to some of the management challenges undermining the continuation of the agropastoral system in Wasdale.

2. Geography of Wasdale

Wasdale, a valley and surrounding lake catchment area, forms part of the southwestern area of the English Lake District (Figure 1). The steep sided valley contains Wastwater, the deepest lake in England at 79m, which is drained in a south westerly direction by the River Irt (Figure 2). The Irt drains into the Irish sea after 14 miles.

Figure 1- The Location of Wasdale

Figure 2 – Wastwater and River Irt, towards Great Gable

The valley extends for roughly 9 miles (14 Km) from the heart of the Lake District with Great Gable and Scafell in the east out onto a flatter plain towards the Cumbrian coast. Typically, the area is considered as two separate though adjacent and related land units (Figure 3). Nether Wasdale (recognised as a medieval Township in its own right) occupies the southern and western end of

the valley and Wasdale Head covers the northern and eastern areas. The latter was originally part of a Township with neighbouring Eskdale, but in the early Twentieth Century was separated off. The two now form the civil parish of Wasdale (E04010484) part of the Gosforth Ward in the county of Cumberland (formerly Cumbria).

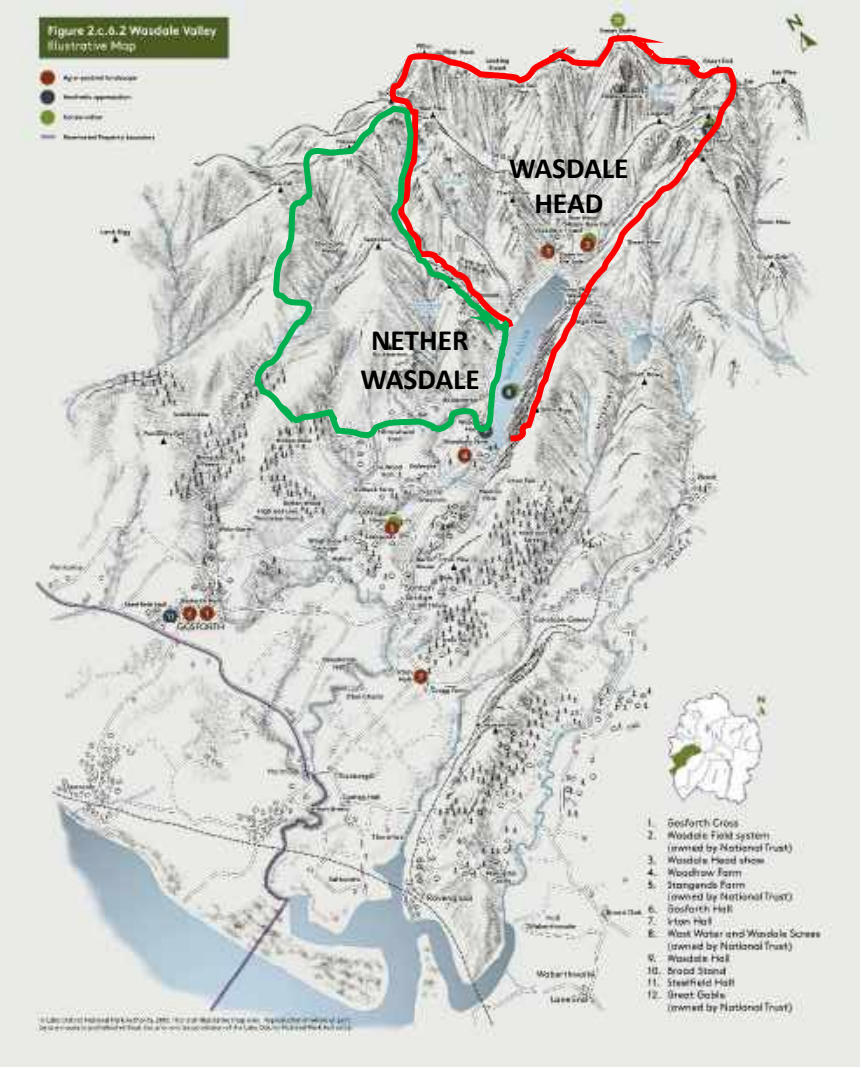


Figure 3- Extent of Nether Wasdale and Wasdale Head

(Illustration source: Lake District National Park Authority, 2015)

3. Influence of Physical Environment on Agricultural Land Use

Wasdale's structure, form and subsequent land use are strongly influenced by its geology. In fact, it is probably one of the most recognised landscapes in the Lake District with its steep sides, deep lake and scree slopes and these geomorphological features form the inspiration behind the Lake District's National Park logo[1].

The earliest rocks representing the majority of Wasdale geology, were created during the Ordovician period ((510 to 439mya), a time of high volcanic activity. This created two types of igneous rocks forming the high rugged fells of the central and western Lake District. The first was a huge intrusion of magma which rose slowly up from the Earth's mantle to create the *granite* now seen to south and north of Wasdale, referred to as the Eskdale Intrusion. The second, known collectively as the Borrowdale Volcanics Group (Figure 4), formed through the gradual closure of an ocean (known as the Iapetus) as North America and Europe collided through plate tectonics[2].

Figure 4 – Scafell part of the Borrowdale Volcanic Group (Copyright: John Hodgson)

The BVG started with a volcanic eruption, moved on to a less volatile lava outpourings onto the surface around what now forms the Birker Fell area further south, and finished with series of colossal volcanic eruptions centred around Scafell. Rocks related to the BVG include *andesite* lava, *tuffs* made from volcanic ash and *ignimbrites*, formed from larger volcanic projectiles held in volcanic ash. All these Ordovician rocks are highly resilient to weathering and erosion, creating the higher land around Scafell, Birker and Seatallan, which when broken down, form ***acid soils***

These rock types form an intrinsic part of the farming system employed as dimension stone in ***building and drystone wall construction***. In turn, this gives the valley some of its distinctive characteristics identified in the Lake District World Heritage Site Nomination Document of 2017[3] and latterly its OUV (Figures 5 and 6).

[1] Lake District National Park Authority (2015: 219)
[2] Toghill P (2000)
[3] Lake District National Park Authority (2017)

Figure 5 – Ghyll Farm, Nether Wasdale

Figure 6 – Drystone walls

Between the Ordovician and the next important geological period for the valley (the Quaternary), the central core of the Lake District became 'domed' and the classic 'spokes of a wheel' drainage developed. Notably, the dome is not symmetrical, with the land mass tilted to the west creating a drainage system favouring the Irish Sea. Combined with the geographical location of the central Lake District of the western seaboard of the Britain, rainfall is high in Wasdale due to the orographic effect around 1584mm per annum (Figure 7).

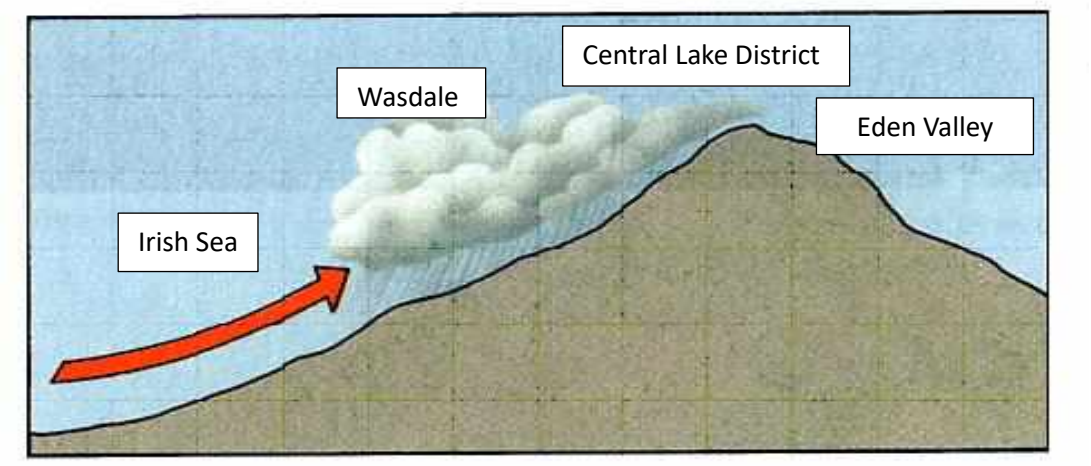


Figure 7 – Orographic Effect across the Lake District

During the first half of the Quaternary (1.8mya to 10.3kya) the classic glacial trough of Wasdale formed along with two smaller sub-valleys known as Mosedale and Lingmell Beck. Geological research around Drigg and Sellafield suggests that the main valley was created early on in the Quaternary with later smaller glaciers exploiting the valley to move eroded material out from the central Lake District towards the plain of the River Irt[4]. This debris (known as till or glacial drift) dragged along the valley bottom and dropped by various glaciers from different glaciations, has

[4] Merritt JW & Auton CA (2000)

resulted in the undulating terrain in the Nether Wasdale area and the creation of the lakebed of Wastwater (2.9 sq km, 5km long) [5].

The last main mass of ice retreated from the Central Lakes around 10,300 years ago and the valley bottom began to fill with water. The lake would have originally extended further towards Scafell on the current inbye land known as Wasdale Head[6]. Consequently, these loamy soils are now some of the more fertile derived from lake sediments and the addition of agricultural, natural and artificial inputs over the millennia.

Once the ice had retreated, the environment remained extremely cold encouraging the development of the internationally iconic scree slopes which follow the southern slope of Wasdale, now known as 'The Side' (Figure 8). The scree slopes formed through a combination of physical freeze-thaw and what is known as paraglacial de-buttressing. Here the valley sides slowly relaxed from the loss of pressure from the previous weight of ice. As the pressure reduces, cracks appear in the rock faces, weakening them, and chunks cascade into the valley and lake of Wastwater below.

The process of de-buttressing is still ongoing and thought to be an underlying cause of the increased number of landslips in the Lake District recently, exacerbated by climate change and more prolonged periods of intense rainfall[7]. There is also some evidence that woodland clearance on the valley sides in early periods of human history (Neolithic, Iron Age and Romano-British, Norse and late Medieval times) has influenced soil erosion in Wasdale[8].

Figure 8 – the Iconic Wastwater Scree slopes known as 'The Side'

The combination of geology, climate, topography and vegetation combine to create a range of acid peaty soils and free draining acid loams on the fell land north and south above Wasdale. Valley floor soils belong to the Ellerbeck Association, which is very stony and well-drained. The lower fellside soils are of the well-drained Malvern Association, above which lies the Bangor Association of shallow, acid, peaty soils with bare rock[9].

[5] Smith NT, Merritt JW & Phillips ER (2023)
[6] Evans, DJA; Brown, VH; Roberts, DH; Innes, JB; Bickerdike, HL; Vieli, A; Wilson, P (2015). 8
[7] Mansfield (2019a)
[8] Chiverrell RC (2006)
[9] Jarvis et al (1984)

4. Landscape and Hill Farming

In response to the physical environment the agro-pastoral landscape of Wasdale and Wastwater has emerged, recognised as one of the defining iconic landscape of the Lake District World Heritage Site[10] and a key stronghold of the iconic Herdwick sheep (Figure 9) [11].

Figure 9 – the Herdwick Sheep

Wasdale's steep sides, limited flat valley bottom and fell tops have led to the development of the classic Lake District hill farming system (Figures 10 and 11) comprised of:

- ***Inbye*** – valley bottom land often enclosed as fields with drystone walls, and usually the most fertile with the greatest agricultural potential (Grade 3 of five classes, where one is best) and improved though the application of Farm Yard Manure (FYM), artificial fertilisers or underdrainage. Semi-natural habitats typical of these areas include: neutral grassland such as hay meadows.
- ***Intake*** – valley sides or uneven land which has been literally 'taken in' from the open fell in the past, usually Grade 4. This land tends to be semi-improved through the installation of tile drains. Different types of woodland can often be found here, which traditionally formed part of the farm system, though less so nowadays.
- ***Fell land*** – unimproved land above the last wall typically physically unbounded which is of Grade 4 or 5. Habitats found here include: dwarf shrub heath, blanket bog and acid grassland. Can include rights of common, freehold or sole grazing rights.

[10] Lake District National Park Authority (2015a:69)
[11] Lake District National Park Authority (2015b:219)

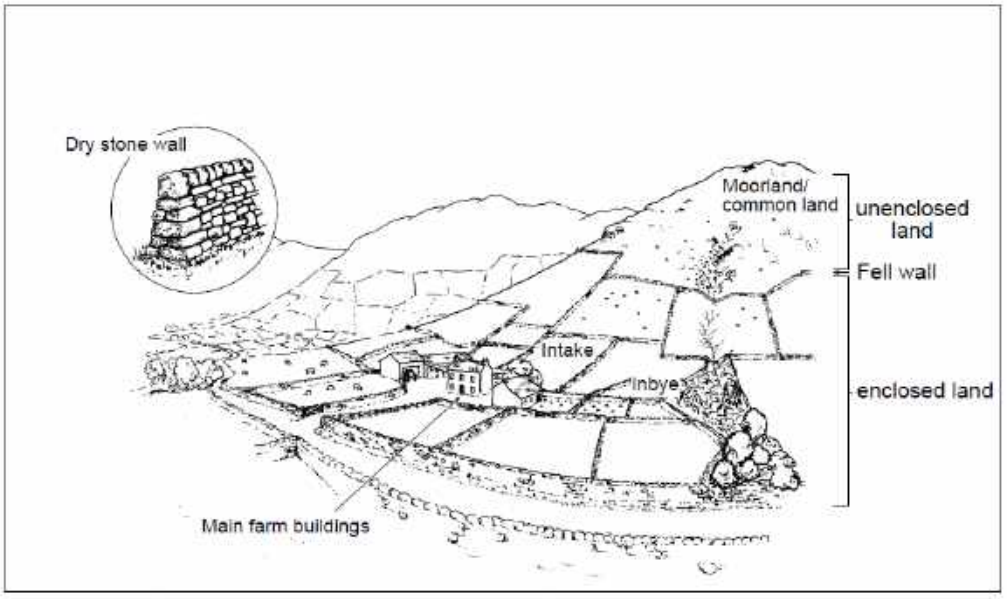


Figure 10 – A classic Cumbrian upland hill farming landscape © Mansfield, 2011:17

Figure 11 – Inbye and Intake at Row Head up onto Kirk Fell

A key element of the upland and hill farm system is the use of common land or open moorland above the fell wall through what are known as *hefts* or *heafs*. A heft is an area of land to which livestock innately graze through learnt behaviour[12]. An open fell can be so large, it can be made up of several hefts juxtaposed next to each other, but given the law related to common rights, have no physical boundaries between them. The right of common is bound up around the number of sheep someone has the legal right to graze on a heft, careful management of stocking is needed to avoid overgrazing and/or soil erosion.

[12] Brown (2009: 42); Davies et al. (2009)

Not all Wasdale is surrounded by common land, only fells to the north and south of Wastwater are registered common, the rest is privately owned as **freehold fell** up around Wasdale Head. Here, mountain or fell grazing land is either let under tenancy to a tenant or owned privately. These areas are operated as traditional Lake District hill farms, generally without a physical boundary between either the neighbouring 'freehold' fell farm or common[13]. In practical terms, the 'freehold' fells are often gathered in conjunction with commons.

To ensure sheep do not drift, a shepherd and dogs historically showed sheep the invisible boundary by herding them repeatedly back onto the heft. As time goes by, the sheep develop an managed behaviour created by shepherding to remain within their virtual geographical boundary and do not wander due to contiguous heft pressure. Once the lambs are born, their mothers show them the heft and thus the knowledge of their grazing land is passed on from one generation of stock to the next. It is therefore important that a grazier today maintains enough sheep in the flock to show the new generation the heft boundaries, hence the concern when entire hill flocks were lost due to FMD in 2001 and the impact of new agri-environment agreements which are looking for large reductions on already depleted stocking numbers. There are issues of stock drift as interheft pressure reduces, for example, Langdale into Eskdale, thus increasing long road journeys to return stock to their owners. Another challenge is larger gathering areas, increasing time needed, compounded by fewer people engaging in gathers.

The other important element of the upland farm system is livestock. Historically, most upland farms ran a combination of cattle and sheep as part of a diversified farm economy either for subsistence and, then latterly, profit. These native livestock were bred to cope with the local environmental conditions which is why breeds vary from upland to upland. In Wasdale the iconic Herdwick, though generations of natural selection in this environment, has adapted to this landscape, with their physiology, whilst making them ideal for thriving on poor grass swards, can be an issue because as they mature more slowly to get to market (costing farmers money). More offal develops as a result and is less desired for public consumption than previously. Nevertheless, native breeds are ideal for grazing semi-natural habitats managed for High Nature Value (HNV) conservation[14]. Such grasslands can be almost organic in their management, and this allows a premium to be added on the sale of free range or low input managed meat or milk. Native breeds also tend to be more resistant than other breeds to certain diseases prevalent in modern intensively managed stock. Some lower upland flocks are made up of mules (cross-breeds) in an attempt to provide hardy stock with both good-quality fleeces and heavy carcasses for meat. These lower upland sheep provide some financial relief from the stock reductions imposed for higher hill areas.

Over time there has been a shift in uplands from a mixed livestock economy towards mainly sheep rearing caused by a combination of political and economic drivers[15]. This switch is probably the biggest area of contention between the farming community and other upland users. There has also been a reduction in native breeds towards fewer more economic breeds, such as the North of England Mule for sheep or Limousins for cattle, which bring with them other issues.

[13] Pers,. comm. Robin Witchell 26/11/23
[14] Mansfield (2011: 12)
[15] Winchester (2000); Mansfield (2011)

Enterprises are managed by moving stock from one type of land to the next, fitting the needs of sheep (and cattle if they exist) around each other depending on time of year. A proviso is that, if upland farms do not have enough inbye land or sheds/barns, the size of the cattle herd will be substantially reduced. The sheep enterprise is based on a flock containing a range of ewes of various ages, which act as the breeding stock. Most farms also have up to ten rams for a flock of breeding ewes (1 ram to 40 ewes), usually from different flocks to avoid too much inbreeding. Lambs can be brought on to replace ewes that get too old to breed or can be sold on for fattening up in lowland Britain. Traditional hefted hill farms breed their own replacement females; thus, every year a % of female lambs will be retained as replacements. This is good husbandry as it reduces the risk of disease introduction through the purchase of replacements. The remaining females not retained, and the males will be fattened if the farm has enough land and access to fell grazing or they will be sold as stores to other farmers to fatten.

Where cattle are kept, upland farms run livestock for beef, using *suckler cows*. The calves are reared by their mothers until they are moved off the farm for fattening in the lowlands. Suckler cows too are eventually slaughtered and enter the beef food chain. Herds are made up of one breed which is sired by certain breeds of bull. Currently, Limousin bulls are particularly popular as sires. Insemination may be either by natural means or through artificial processes. Native breeds for specific purposes, such as Belted Galloways or Blue-greys, have become popular over recent years as farmers seek ways to add a premium to their meat to increase farm incomes. Like the sheep they are slow to mature but can utilise the poor nutrition to fatten slowly, plus they can winter outside. Limousin cattle have to be fed grain in order to fatten and can fatten quickly when fed. Dairy herds on the upland margins are typically Holsteins, which have replaced Friesians because the Holsteins increase milk yields. In Wasdale, the last small herds disappeared around 2001.

The availability of land types, choice of livestock and the method of forage production therefore are crucial to the farmer to ensure that economic success is underpinned by a sustainable management system[16]. To do this, the upland farmer aims to operate a farm system which maximises the farm's potential while avoiding deterioration of the resources available. Most farmers reach this point through practical trial and error, their own experience, that shared from the older generation and/or some form of formal training, consequently human and social capital are pivotal. Central to any of these strategies is to balance the fodder (feed) resource with the size of herd or flock. This can be achieved in a range of ways, such as supplementary feeding stock when there is no natural fodder (financially expensive); switching from hay to silage (ecologically expensive) or employing a process called *stratification*[17].

Stratification is the process of breeding animals that move down the hill. It is unique to the UK, It is a three-tier production system that includes the hill, the upland, and the lowland subsystems. In the hills, pure-breed ewes are kept, and draft five-year ewes are brought down to the uplands where they can still have a couple of years of productive life. Here Hill breeds are crossed with longwools to produce a mule, they move down the hill and mules are crossed with terminal fat sheep to produce a commercial carcase.

[16] Mansfield (2011)
[17] Mansfield (2011:24)

5. Capitals, Attributes and the Socio-Ecological System of Hill Farming

The land types of inbye, intake and fell have enabled farmers to adapt to the harsh physical conditions found in Wasdale and in response their farming shapes the character of the landscape. We can appreciate this interrelationship in more detail by breaking it down into six components known as **capitals** (Figure 12):

- **Natural** - Ecosystems, species, freshwater, land, minerals, air which lead to the production of ecosystem services
- **Physical** - Physical structures such buildings, land that a person has at their disposal, livestock
- **Human** - Unique knowledge and skills individuals bring to a situation
- **Social** – how we work together, sometimes referred to as 'the glue that holds society together'
- **Cultural** - Tangible and intangible features created by the interaction of people with their environment.
- **Financial** - Money to put into a venture from a variety of sources.

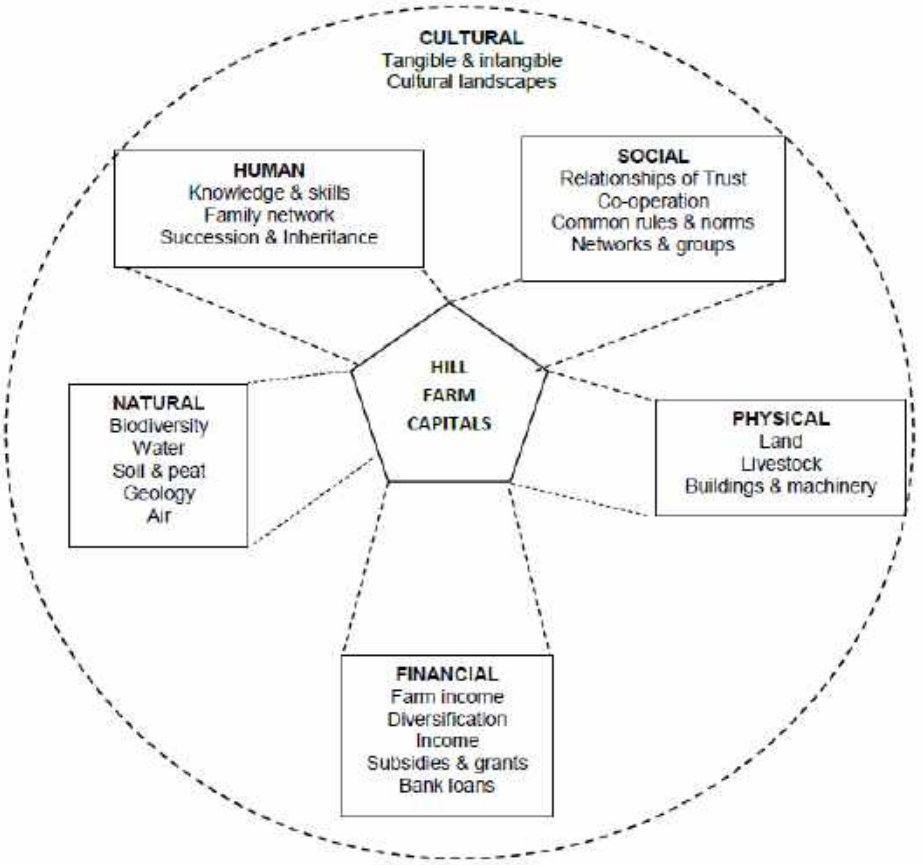


Figure 12 – Six Capitals in Hill Farming[18]

[18] Mansfield (2019b:22)

Each capital can be linked to different attributes found in a hill farming system, examples of these are given in Table 1. This project is particularly interested in exploring more about **cultural and social capital** generated by Wasdale hill farming.

Table 1 – Attributes of Hill Farming in Wasdale

Capital	***Attributes***
Natural	Upland moorland mosaic: Dwarf shrub heath, bogs and calcifugous acid grassland [rough grazing] Hay meadows, rush pastures Ancient woodland – eg. Fence Wood in Wasdale Wastwater & scree slopes Hedgerows and drystone walls Peat deposits both fell tops and around Harrowhead
Physical (see cultural)	Farmsteads of study area: Bowderdale, Burnthwaite, Brunt House, Church Stile, Easthwaite, Ghyll, Harrow Head, Row Head, Wasdale Head Hall, Wood Howe, Yew Tree
Human	People: Farmers, commoners and farm families Knowledge & skills: commoning, heft management, drystone walling, hedgelaying, stick dressing
Social	Commoning, hefting, Commoners Association, West Lakeland CIC, Wasdale Agricultural Show
Cultural	Cultural Heritage eg Archaeological sites and monuments, field boundaries, peat workings Tangible: Farmsteads, Commons, Hefts, livestock, Herdwick sheep, land, Shepherds Meets, Sheepdog breeding, sheep dog trials Intangible: traditions and practices, commoning, hefting, dialect, sense of place
Financial	Private finance – farm business, bank loans Public finance – Farming in Protected Landscapes, Higher Level Countryside Stewardship, Sustainable Farming Incentive etc…

To appreciate why the farming in Wasdale is so special we can compare it to more industrialised agricultural systems found in other parts of the UK. East Anglian arable farming relies heavily on financial capital through the application of machinery, for example, combine harvesters. Some farm enterprises need greater applications of artificial chemicals to reduce pests and diseases, such as sugar beet production. A third example, intensive pig farming needs high levels of finance for buildings. In contrast, hill farming has a much closer relationship with the environment developing an extensive farming system which utilises the natural environment, whilst at the same time shaping it in a less intensive way.

These extensive farming systems which are more in balance with nature are referred to as **socio-ecological systems** (SES) and are found all over the world where industrialised farming has yet to prevail[19]. It also forms a fundamental element for World Heritage status, as these landscapes are less prevalent in Europe today, but remain strong in the Lake District. Key characteristics of socio-ecological systems are:

[19] Berkes *et al*. (2003); Olsson *et al*. (2004); Folke (2006)

- Low input-low output agricultural systems
- Recognised as High Nature Value landscapes[20]
- Application of few artificial inputs eg fertilisers, pesticides, animal medicines
- Labour cannot be replaced by machines in many circumstances.
- Communities are often indigenous to that area
- Enterprises biologically fit the environment, rather than the environment is adapted to fit.
- The system utilises shared resources known as 'common property' or 'common-pool'.
- People are important to the systems continuation, often working collectively or at a community level.

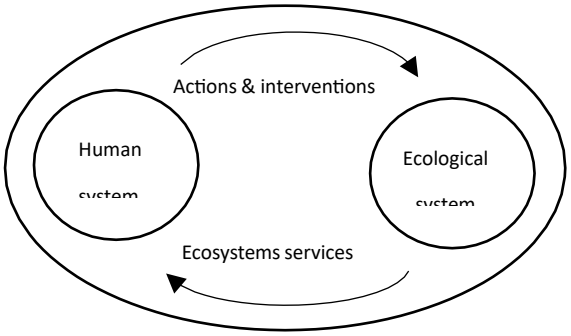
These are all characteristics exemplified by the farms, farmers and their communities in Wasdale (Figure 13).

Figure 13 – The Wasdale Socioecological System – A Farmed Cultural Landscape

Another way to think about a SES is shown in Figures 14 and 15 [21]. Fundamentally, it shows the interrelationship between human systems and ecological systems operating through actions and interventions by people, which then derive ecosystem goods and services in return. This is particularly important for agricultural landscapes, which are products of how people work with and are constrained by the environment to produce food.

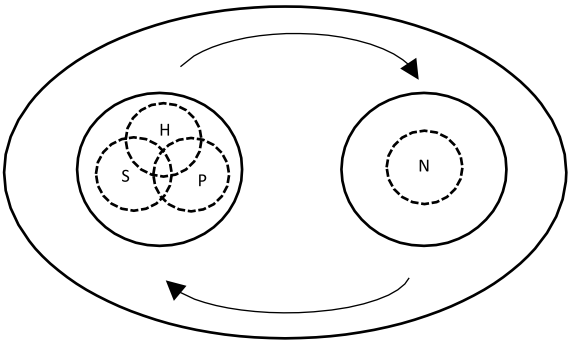
[20] Bignall & McCracken (2000)
[21] Resilience Alliance, 2007: 8 cited in: Wu & Tsai; 2014: 61/62)

Figure 14 – The Concept of a Socio-Ecological System



A more detailed examination of the human sub-system shows that it is a combination of human, social and physical capital, and natural capital can be found within the ecological system (Figure 15).

Figure 15 – Addition of capitals into SES



The combined effect is that SES are created through traditional farming practices which use systems developed over hundreds, if not thousands of years, by generations of indigenous and/or local people working together[22]. The challenge for SES (sometimes referred to as socio-ecological productive systems or SEPLs[23]) is that modern economics and government intervention has distorted and undermined the way in which they function in a drive to increase productivity from a landscape, which cannot sustain such levels without inflicting environmental damage. This in turn degrades their natural, social and cultural capital. Consequently, society can lose the ecosystem services these agricultural landscapes provide.

[22] Hernandez-Morcillo *et al* (2013)
[23] Jayaraman *et al* (2014)

6. Cultural, Social and Natural Capital in Hill Farming

The overall purpose of this work is to report upon the value of cultural and social capital generated by Wasdale farming. A sister exercise has already produced a map of the natural capital of Wasdale[24]. In this section we will explain more about cultural and social capital and demonstrate how they relate to natural capital. For convenience we have divided cultural and social capital from each other, but there are many aspects of both that are intertwined where both cultural and social value exist together.

6.1 Cultural Capital

Overall, culture refers to a set of attitudes, practices and beliefs a particular group in society accepts and employs on a day-to-day basis. Within that list will be items and activities which hold some sort of value for that society. Cultural capital, following on from the ideas of economic capital, therefore refers any asset which adds value to a culture[25]. Cultural capital can have spatial (geographical) character to it (like a farm or heft) or temporal character which takes time to build, so elements of it can hard to replace if lost, for example, hefting.

Cultural Capital assets may be:

- **Tangible** – buildings, sites, structures or locations which hold cultural significance for the society in question. Hill farming examples include farmsteads, farm buildings, drystone walls, hedgerows (Figure 16). We can also include structures from past societies that remain in the landscape as archaeology.

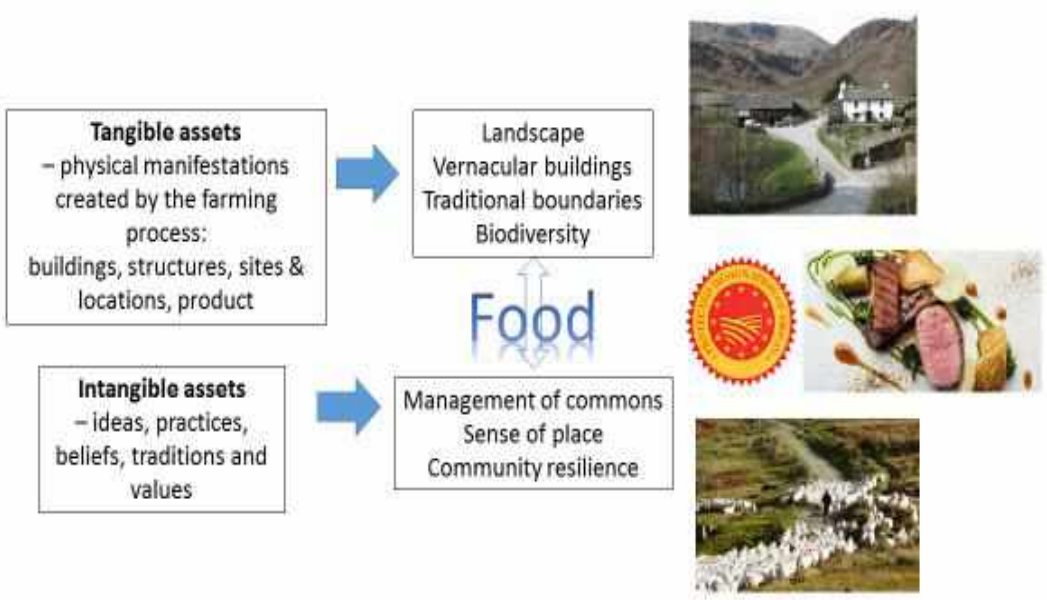
Figure 16 – A stone barn at Burnthwaite Farm

[24] Wasdale Farmers Natural Capital Mapping – Contact H Race.
[25] Throsby (1999)

- **Intangible** – ideas, beliefs, traditions, and values which identify and bind a group of people together. Hill farming examples include: commoning, hefting, gathers, dialect.

These assets, known as stock cultural capital, are the basic building blocks of a particular culture. From these other cultural services may flow over time (Figure 17). For example, the cultural capital derived from hill farming can be appreciated by tourists visiting the area through recreational visits or experiencing local food, in turn this can advance the cause if hill farming.

Figure 17 – the Cultural Capital of Hill Farming



A third element of cultural capital can be referred to as **Cultural Heritage**, this is usually linked to cultural activities generated by past communities or societies, or all that has come before. Our understanding of this in Western societies typically comes from examining archaeology (before the written record arrived) and history (through written records). For societies elsewhere in the world, cultural heritage may be based solely on oral tradition.

European hill farming systems, rich in cultural capital, straddle these two worlds in that oral transmission of knowledge and skills is a fundamental component for the continuity of hill farming, thus succession and inheritance are crucial. In contrast, archaeological and historical information provide us with insight into how hill farming and the wider landscape has changed over time in response to farming activities. At times it can help forecast the impact of change from external drivers and demonstrate the importance of learning from the past to build resilience for the future[26],[27].

6.2 Social Capital

Social capital is a harder concept to grasp as much of it refers to intangible characteristics and processes. One definition is '*features of social organization, such as trust, norms, and networks*

[26] Costello (2020) and Costello (2021)
[27] Mansfield L (in prep)

that can improve the efficiency of society by facilitating co-ordinated actions' [28]. The key idea is that relationships between individuals are important, and their joint action can address the challenges of everyday life. In other words, useful resources and assets emerge from people working together for the common good. For our purposes here, four types of social capital can be identified[29]:

1) *Relations of trust* – how people depend on each other, how they lubricate cooperation and reduce transaction costs.
2) *Reciprocity and exchange* – sharing resources and knowledge of roughly equal value.
3) *Common rules and norms* – following agreed ways of behaving, sometimes referred to as the 'rules of the game'.
4) *Connectedness, networks and groups* – working together.

Hill farming is replete with social capital, it is not only the 'glue' but the grease which makes this system function effectively (Table 2). Lack of social capital or its erosion due to other challenges can impact negatively on the resilience of hill farming[30].

A particular characteristic of '*Connectedness, networks and groups'* is the types of networks which operate, of which there are three:

Bonding – which emerge through trust and cooperative relationships between members of community who have similar sociodemographic characteristics, have strong ties, informal collaboration, long-term reciprocity and 'thick' trust. These are extremely important in communities who rely on each other for common property resource management (as on English common land) Eg hill farmers operating on the same common.

- *Bridging* – these develop between people to achieve certain goals. They demonstrate collaboration and coordination but cover larger and looser networks of communities of interest[31] with weaker ties, more formalised collaboration, and 'thinner' trust. Eg a Breeders Association

- *Linking* - where respect and networks of relationships between people who are interacting across formal institutional or organisational boundaries. Eg. a Protected Landscapes Partnership

As farming communities contract, it is evident that their social capital reduces[32]. This can manifest itself through a reduction in the amount and quality of linking capital, as the pressure of everyday farming operations limits the number of individuals who have time to engage. Such a situation can leave the remaining community feeling isolated and beleaguered, and as a result bonding capital can increase.

[28] Putnam (1993:167)
[29] Pretty & Ward (2001)
[30] Burton et al (2005)
[31] Communities of interest – groups of people who come together with a common interest, but are necessarily geographically next to each other, work for the same organisation or move in the same social circles
[32] Pretty & Ward, 2001; Burton et al.,2005.

Table 2 – UK Hill Farming and Social Capital[33]

Dimension	Process	Examples of Social Capital
Relations of trust	Hefting Gather	Shared grazing areas require managers to not overstock or let stock drift, affecting others' resource base. Collection of multiple flocks from one fell with adjacent contiguous hefts through co-operative working.
Reciprocity and exchange	Shepherds' meet Machinery Labour Other equipment	Opportunity to share knowledge and exchange/ sell stock Share costs, help with tasks needing more than one person, shared boundary maintenance Shared skills of drystone walling, sheep shearing, hedgelaying
Common rules and norms	Commons management Heft management	Ensuring stock are appropriately dipped, vaccinated and wormed to avoid spread of disease. Maintaining stock on heft and maintaining animal welfare through constant supervision
Connectedness, networks and groups	Commons associations Breed associations Farmers markets Livestock markets	Managing rules and norms related to commoning system eg legal issues, sanctions, applying for grants/ schemes Sharing knowledge, ideas & common interests. Organising and participating in social events and agricultural shows. Maintaining the character and constitution of the sheep to ensure they are fit for life on the high fells. Developing and sharing short food supply chain opportunities with trusted colleagues Conducting sales and socialising with peers

[33] Adapted from Mansfield (2011) and Morgan (2024)

In contrast, the availability of elder farmers who can relinquish everyday farm management to the next generation is a great boon. These elder farmers play a crucial role in advocacy beyond the local community, particularly regarding broader land management partnerships of which farming is only part of the latter's agenda. Speaking at events, sitting on land management committees and grant panels all provide key opportunities to raise the profile of hill farming, its issues and challenges. It also offers opportunities for farmers to reduce cognitive conflict[34] by explaining the pragmatics of farming systems, activities, and attitudes.

6.3 Linking Cultural and Social Capital to Natural Capital

As discussed above, hill farming is an example of a socio-ecological system where people influence and are influenced by their surrounding natural environment. In places rich with cultural capital and cultural heritage, the longevity of its settlers enables them to develop a management system in tune with their natural environment through trial and error, over hundreds if not thousands of years, hence the importance of oral transmission. These are referred to as **local knowledge systems** (LKS), of which hill farming is an example (Figure 18).

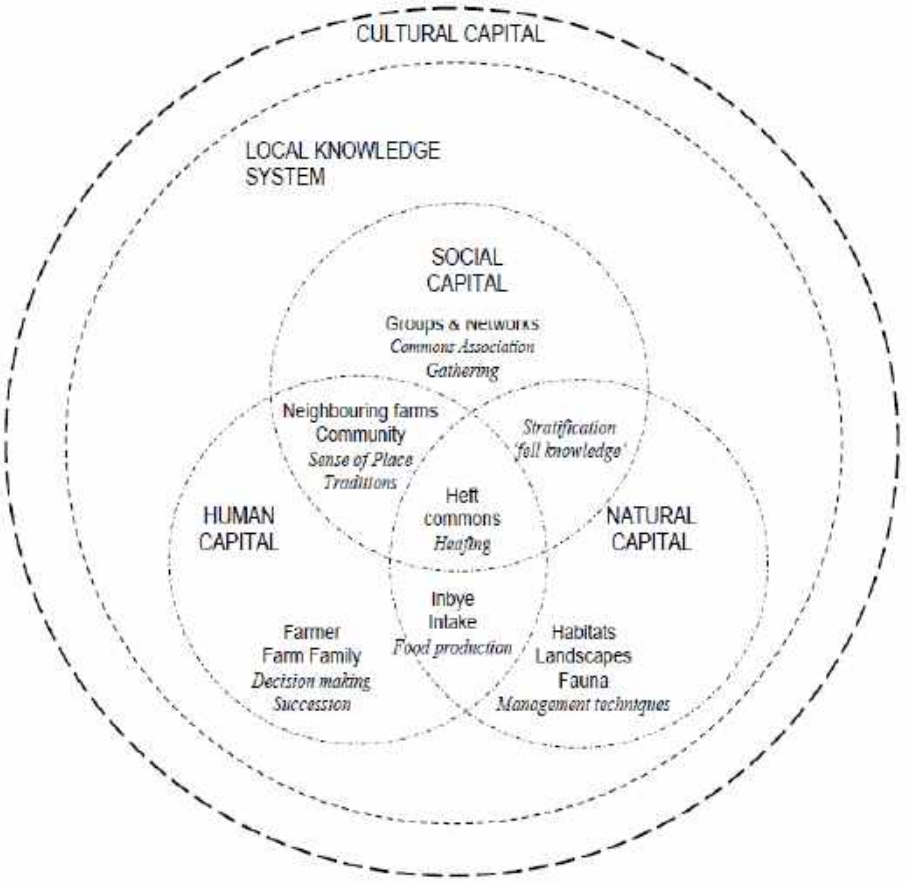


Figure 18 – the Hill Farming Local Knowledge System[35]

[34] Cognitive conflict – the way in which one group of individuals perceive an issue from their own knowledge and understanding which may be at odds with another group.
[35] Adapted from Mansfield (2011:215)

Both SES and LKS identify the interrelationship between social, cultural and natural capital. This relationship is two-way, natural capital acts as a controlling factor in shaping how farmers farm in uplands (see earlier). They have adapted their farming strategies to fit within this environment, farmers have evolved has developed a particular social organisation of how the land is farmed. In return, the way farmers farm has produced a range of habitats which would not have evolved if there had been no farming in this environment[36], a fact recognised for years through various iterations of agri-environment schemes in the UK and EU[37]. This has recently formally re-acknowledged in the Joint Statement between DCMS, DEFRA and Natural England[38].

Explicitly examples include:

- Fell tops - upland mosaic of dwarf shrub heath, bog and acid grassland
- Valley sides– rush pastures
- Valley bottom – hedgerows and hay meadows

Drystone walls which can occur in all three zones, whilst inanimate, provide a plethora of ecological niches for wide range of biodiversity and are valued for many ecosystem services [39]. Farm buildings provide surfaces for many lower plants to flourish and, internally, roosts for bats and birds.

In order that these features are protected, enhanced and managed properly hill farming is needed. Consequently, its **cultural and social capital must be recognised as fundamental to the operation of the system** and thus supported to be more resilient to attain the new Protected Landscapes Targets and Outcomes Framework[40].

We now turn to exploring the character and value of cultural and social capital of Wasdale farming, beginning with an overview of its cultural heritage.

[36] Ostermann (1998); Mansfield (2011); Costello (2020)
[37] Mansfeld (2011)
[38] JOINT STATEMENT (2024)
[39] Powell et al. (2016)
[40] Protected Areas Targets and Outcomes Framework

7. Cultural Heritage: A Brief History of Wasdale & its evolving Landscape

Whilst it is not the intention of this report to repeat previous archaeological and historical surveys (see footnotes and reference list), the following brief summary is designed to demonstrate the rich cultural heritage of the Wasdale landscape. Overall, we can describe Wasdale as a farmed palimpsest[41].

The National Trust (2000: 7) state:

> *'The Wasdale Head landscape is perhaps the most complex, distinctive and unusual within the Lake District. Lying at the head of Wastwater and framed by high mountains, its valley floor pattern of many small, often strangely shaped fields is highly visual when viewed from both the surrounding fells and from ground level.'*

In contrast, the western area of Nether Wasdale, in the LDNPA World Heritage nomination document[42] is described as:

> *' … rolling or undulating farmland continues west with the distinctive field boundary walls, built with rounded, beck bottom stones that appear to defy gravity and inspire awe at the skill of the wallers who built them. These give way to hedges and more frequent woodland cover creating an altogether softer appearance to the landscape. Further west still the land becomes flatter and woodland cover and hedgerow trees become less frequent leading to a more open landscape.'*

This distinctive Wasdale cultural farming landscape has emerged over a long timeframe to provide us with the current day palimpsest. For convenience a summary of the main landscape features for Wasdale Head and Nether Wasdale are provided on Tables 3 and 4 derived from several detailed Historic Landscape Surveys[43]. It is important nevertheless, to remember that not all farms and farmers involved in the production of this report are National Trust tenants and thus some areas do not have as extensive archaeological surveys to provide a complete picture of the valley's tangible cultural heritage. Some of this additional value is captured in Sections 8 and 9.

For convenience, National Trust farms include (those in this study in **bold**):

- Wasdale Head –**Row Head**, **Wasdale Head Hall**, **Burnthwaite**
- Nether Wasdale – Thistleton, Bengarth, **Brunt House with Kidbeck**, **Ghyll**, **Bowderdale, Harrowhead**

Private farms included in this study, all of which are in Nether Wasdale:

- **Church Stile, Easthwaite, Wood How, Yew Tree**

[41] Palimpsest landscape – observable remnants of previous occupants activities of different archaeological and historical periods can be seen in the contemporary landscape sometimes overlying, showing through or obliterating one another.
[42] Lake District National Park Authority (2015) Chapter 6
[43] National Trust (2000) and Archaeology North (2009)

Table 3 - Wasdale Head National Trust Properties: Archaeological & Historical Timeline

Dates	Period	Features of Interest	Fells and Commonland	National Trust Farmsteads		
				Row Head	Burnthwaite	Wasdale Head Hall
21st C		Extant operational property	■	■	■	■
20th C	1979	NT acquire Wastwater				
	Mid	NT acquires Row Head and Burnthwaite	■	■	■	
	Post WWI	NT ownership of Scafell, Lingmell, Great Gable and Kirk Fell (freehold fells)	■			
19th C		Arrival of WHH on old deer park Private Enclosure of land Intakes	■			■
18th C		Private Enclosure of land Drystone walls valley bottom Intakes	■	■	■	
17th C		Drystone walls valley bottom Intakes		■	■	
1603 to 1485	Tudor	Drystone walls valley bottom Intakes Deer park enclosure		■	■	
1485 to 1066	Late Medieval	Vaccaries Cattle ranches Expansion of Wasdale Head valley floor enclosure via a ring garth Deer park enclosure Commoning in Statute	■			
1066 to 410 AD	Early Medieval	Original small ring garth enclosure around Wasdale Head		■		■
		Norse place names Possible sheiling sites			■	
410 to 43AD	Romano-British	No evidence to date				
43AD to 650	Iron	No evidence to date				
c. 650 to 2000 BCE	Bronze	Cairnfields Building platforms	■		■	■
2000 to 4500 BCE	Neolithic	Stone axe working sites around Scafell & Brown Tongue	■			

(Source: National Trust (2000) '*An Historic Landscapes Survey of Wasdale Head*' National Trust: Grasmere)

Table 4 – Nether Wasdale National Trust Properties: Archaeological & Historical Timeline[44]
(No number in parentheses greyed out means ubiquitous on all farm areas.)

Dates	Period	Features of Interest	Fells and Commonland	National Trust farms			
				Bowderdale	Brunthouse	Ghyll	Harrowhead
21st C		Extant operational property					
20th C	1999	Farm acquired by NT					
	1976	Farms acquired by NT					
	1965	Farms acquired by NT					
19th C		Current farmhouse built Barn and byre (1) Walls added (2) Parliamentary Enclosure (3) Threshing barn (4)		(2)	(1) (2)	(1) (2) (3) (4)	(1)
18th C		Sheep folds & Beilds (1) Current farmhouse (3) Walls added (2)		(2) (3)	(1)	(1) (3)	(2)
17th C		Sheep folds & Beilds					
1603 to 1485	Tudor	Private Enclosure Drystone walls Lynchets (1) Peat cutting (2)					(1) (2)
1485 to 1066	Late Medieval	Commoning in statute Leased land to Calder Abbey Copeland Forest Stone clearance piles (1) Drystone Walls (2)		(1)		(2)	
1066 to 410AD	Early Medieval	Norse place names (1) Ring garth (2) Sheiling site (3)		(1) (3)	(1)	(1) (2) (3)	
410 to 43AD	Romano-British	No evidence to date					
43AD to 650	Iron	No evidence to date					
c. 650 to 2000 BCE	Bronze	Cairns, burial mounds, Cairnfields Burnt mound (1) Settlement (2)		(2)	(1)	(1)	
2000 to 4500 BCE	Neolithic	Cairns, burial mounds, Cairnfields Stockdale Moor & Town SAM* Town Bank SAM*					

[44] (Source: National Trust (2000) '*An Historic Landscapes Survey of Wasdale Head*' National Trust: Grasmere; *Scheduled Ancient Monument

7.1 The Wasdale Palimpsest: Neolithic (4500 BCE) to 2000AD

Archaeological evidence exists from the Neolithic (4500 to 2000 BCE) in relation to the famous axe factories of Scafell[45] in the form of stone axe working sites on Brown Tongue directly east and above Wasdale. Possible Neolithic cairns and cairnfields[46] are found on the fells of Nether Wasdale notable ones being 'Sampsons Bratfull' on Stockdale Moor and another at Town Bank.

Further along around Wasdale Head and Burnmoor (forming the ridge into adjacent Eskdale) are Bronze Age (2000 to 650 BCE) cairns created by agricultural field clearance along with several building platforms, where huts would have once stood. There are extensive cairnfields, burial mounds and possible hut platforms in Nether Wasdale in three areas; 893 individually recognised features in 15 locations around Town Bank, 838 in 9 locations on Stockdale Moor and 716 on Whin Garth in 10 locations [47]. A range of Scheduled Ancient Monuments (SAMs) (Table 5) are found in Nether Wasdale from this period, representing agricultural activity and transient settlements related to improved climate and there is evidence from further east in the Lake District that woodland clearance took place[48].

Site Name	Scheduled Monument Number	Period	NTSMR Number
Town Bank prehistoric stone hut circle settlements, field systems, funerary cairns, ring cairn and cairnfield	27825	Bronze Age	9333-6, 9338, 9342-3, 9345-8, 11676-8, 30976-84
Monks Graves prehistoric cairn cemetery, cairnfields, field system, funerary cairns and a ring cairn on Stockdale Moor	27827	Prehistoric	9300-02, 9304, 9307, 9326, 30964-70
Stockdale Moor prehistoric cairnfields, field systems, unenclosed cairn cemetery, ring cairns and funerary cairns	27826	Prehistoric	9312- 19, 9322-5, 30950-62, 30973-5
Ring cairn on Stockdale Moor 825m west of Pearson's Fold, north of Cawfell Beck	27828	Prehistoric	30971
Yokenill Hows, Group of Seven Cairns	CU 104	Bronze Age	3040, 8779
Gray Borran, Group of Cairns	CU 103	Bronze Age	8772
Monk's Bridge 320m south east of Farthwaite	27850	Medieval/ post-medieval	3052 (Listed Building 76197)
Cairns and hut circles at the junction of the River Calder and Whoap Beck	CU 79	Bronze Age	1197, 4292, 4299, 6078, 6079
Tongue How prehistoric stone hut circle settlements, field systems, funerary cairns, cemetery and cairnfield, Romano-British farmstead, shieling and lynchets	27822	Prehistoric	9353, 9355-60, 30985-30995
Lank Rigg Round Cairn	CU 78	Bronze Age	3597

Table 5 – Scheduled Ancient Monuments around Nether Wasdale (taken from OA North (2009:123).

[45] Claris & Quartermaine (1989)
[46] Cairns and cairnfields – stones cleared from the land and heaped up, indicative of land clearance for various agricultural purposes such as grazing animals or flushing game.
[47] Claris & Quartermain (1989)
[48] Oxford Archaeology North (2007)

There is little tangible evidence between the Bronze Age and early Medieval period around Wasdale. Much of this is due to climatic deterioration at the end of the Bronze Age identified by a change in the pollen record[49] back to woodland species. Nevertheless, there is some evidence of marginal areas being used into Iron Age further west from Wasdale on Town Bank and Stockdale Moor[50]. The Romans subdued the local Brigantes around AD90, but there is little or no evidence of their activity in Wasdale, which is instead limited to the coastal belt, thus the supposition to date is that the area remained non-Romanised[51] but exhibited traits of Romano-British society.

With the departure of the Romans in AD410, little tangible archaeological evidence has been found for the Early Medieval period (AD410 to 1066). Politically, it is suggested that Wasdale and most of the Lake District became first part of the Kingdom of Rheged (410AD to 600AD) and then the Kingdom of Northumbria[52]. The pollen record suggests expansion of settlement, clearance of woodland in valley bottoms and more agriculture.

After this time, the area was influenced by waves of Norse settlement from the 9th and 10th Centuries, which can be identified by **place names** (eg *thwaite* – originally thveit meaning a woodland clearing and *toft*, the site of a house or building, *keld,* a spring and *by*, a farmstead, village or settlement). Further examples include the derivation of Scafell (pron. Scawfell) and 'Copeland', which comes from the Old Norse *kaupa-land* meaning 'bought land'[53] and the elaborately carved cross found in Gosforth church. With no tangible evidence to the contrary, it is possible to speculate that permanent Norse settlement along the coastal plain led to the inland valleys and uplands being used for summer grazing or transhumance[54], and possibly later shieling grounds[55].

During the 12th Century the language of **Cumbric**, spoken in Cumberland, Westmorland, north Lancashire and the southern Scottish Lowlands became extinct. Cumbric, not to be confused with the Cumbrian dialect, was an ancient language akin to Welsh, Cornish and Bretton. As a result, certain names of settlements and other landscape features have a root in Old Welsh; for example *Pen*-rith and the use of the word '*frith*' in Wasdale, which actually simply refers to an intake and not a fenced area of wood [56]. Blending with the remnants of Cumbric, many Norse terms for different locations continued to be applied well into the 14th Century as part of the **Cumbrian dialect**. So it has been difficult to determine in the Wasdale area which are truly Viking and which

[49] Pollen record – pollen from plants can last for millennia in peat deposits where oxygen is excluded. Each species' pollen has a characteristic shape which allows the reconstruction of past environments, the arrival and character of agriculture to be determined.
[50] National Trust (2000)
[51] OA North (2009: 19).
[52] Higham (1986)
[53] Winchester (1985) cited in National Trust (2000).
[54] Transhumance and shielings – temporary movement of stock to higher altitude summer pasturage known as shielings in Scotland and Northern England and hafod in Wales (see Mansfield, 2011: Chapter 3).
[55] National Trust (2000)
[56] National Trust (2000:39) compared to Thomas (1992).

Medieval, as Viking society left few physical traces in the landscape [57]. There is also conjecture that this period saw the **arrival of the iconic Herdwick sheep** to the area[58].

Most of the British uplands at this time, like Wasdale, were common land or freehold unenclosed manorial waste, where local people had the 'right' to extract resources away from the local lord's better land, which they farmed on his behalf. Common rights[59] were various, but the main ones included:

- estover (collection of fallen dead wood)
- pannage (grazing pigs)
- pasturage (right to graze stock)
- turbary (to cut peat).

In Wasdale, there are remnants of **peat extraction at Harrowhead**, but the most important is **pasturage**, which continues through to the present as commons grazing on the land around Nether Wasdale (as outlined earlier).

As part of the later Kingdom of Strathclyde, Wasdale remained in Scotland until the 12th Century, and thus was excluded from Domesday (1086AD). Around 1135 Wasdale (part of a huge land area from the Derwent to the Duddon) came under the ownership of Ranulph Mesclines (the Barony of Egremont) through a crown grant. Having already donated land in 1134 for the foundation of the abbey at Calder, only to be burnt down three years later by a Scottish raiding party[60]. This foundation was re-established by the Cistercians for wool production in 1142, setting up various granges[61] to the north of Wasdale and by 1537 (the time of Dissolution) they also owned **The Side**, along the eastern shore of Wastwater[62].

It is suggested that later in the 12th Century the valley floor around Wasdale Head was enclosed using a single wall known as a ring garth, within which unenclosed strips were allotted to different individual farmers to be used for arable agriculture or as meadow during the summer months and for stock grazing over winter[63]. A larger ring garth covering the valley floor down to the lake shore evolved in the 14th C and still survives in some places, in others its line has been preserved through later walling. Four vaccaries were also established[64].

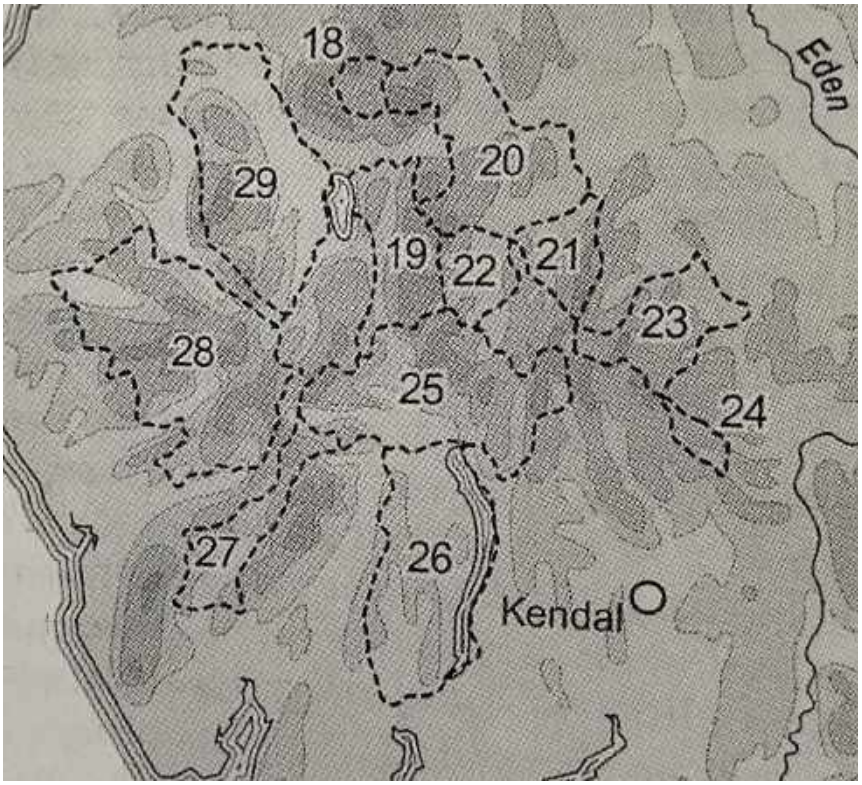
Whilst the land inside both earlier and later valley floor enclosures was initially open field (ie each household had their own strip of land to cultivate without boundaries from their neighbour), it was converted to individual walled fields over several hundred years probably between the 15th and 18th C[65]. The varied shapes are determined by who managed which strip, physical changes in

[57] Winchester & Crosby (2006)
[58] Brown (2009); Bowles *et al* (2014)
[59] Aitchison *et al* (2000)
[60] Burton J (1994)
[61] Grange – outlying farm units away from the main monastic foundation run by lay brothers. After Dissolution many became private farms in their own right.
[62] OA North (2009: 22)
[63] National Trust (2000)
[64] Vaccary – a cattle farm to produce oxen for ploughing, usually valley floor and lower fellside systems, with the cattle removed from the former and placed on the latter in summer to allow the production of hay.
[65] National Trust (2000: 29)

microtopography and the creation of the lane running into Wasdale Head along the northern floor edge.

As well as the valley floor, Mesculine's land included an area known as the Copeland Forest (a private rather than Royal institution), one of several covering the Lake District (Figure 19). These 'forests' were a legal entity constituting different land uses, and as the purview of the landed gentry were fiercely protected from local communities through highly punitive rules, equivalent to Royal Forest Law[66].

Figure 19: Medieval Upland Forests in the Lake District



18 Skiddaw Forest

19 Castlerigg

20 Greystoke

21 Martindale

22 Grisedale & Glencoyne

23 Ralphland

24 Fawcett Forest

25 Kendal

26 Furness

27 Ulpha

28 Copeland

29 Derwentfells

(Source with kind permission: Winchester, 2004:28)

Some barons sought additional income from these areas through the exploitation of upland moors as grazing grounds through agistment (selling grazing rights to neighbouring communities) or valley bottom cash tenancies as vaccaries (cattle farms). Thus, a system of commons, agistment and vaccaries emerged.

In 1235 the Statute of Merton, whilst enabling the landed gentry to begin to enclose common (thus forming the freehold land around Wasdale Head), it also helped to re-assert common rights according to custom and practice (to the north and south above Wastwater). This Statute along with the Commons Registration Act of 1965 are often quoted as the two defining moments for the continuation of commons in England, with the more recent Common Act 2006 less so.

[66] Neville Havins (1976)

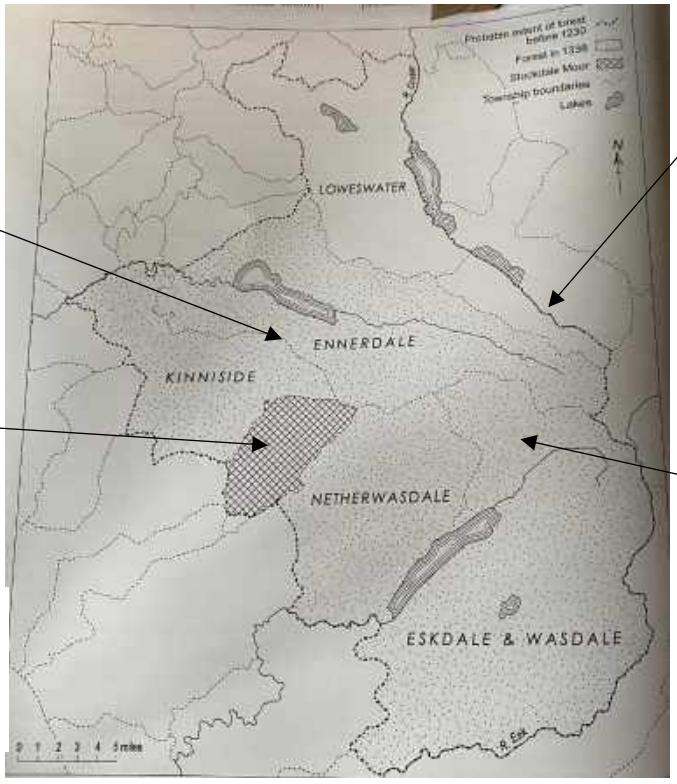
The Cumberland region moved continuously between English and Scottish hands until 1237, when the Treaty of York drew up the current permanent border, and Wasdale became firmly part of England.

Wasdale (Wastedal(e) or Wassedale), possibly meaning 'the valley of the lake' first appears in the historic record in 1279[67] and Wasdale Head,

> *'as a distinct area in 1334 when 'there are there four vaccaries [cattle ranches] in the place called Wascedale heved in the hands of tenants at will' (P.R.O. C.135/41/1.'*[68]

In 1338 the land was divided into three pieces of which the *Middleward* included Copeland Forest, the valleys of Wasdale and south across into adjoining Eskdale. In 1384 through marriage, the areas of Nether Wasdale and Wasdale Head, Kinniside to the north and Eskdale to the south past into the hands of the Percy Family (Dukes of Northumberland[69]). Many legal forest rights by this time had shrunk to the upland parts of their landownership, (Figure 20) but for our purposes still included today's case study area of Wasdale Head, Nether Wasdale and Wasdale, the only outlier being Stockdale Moor which was used for agistment land by coastal farmers[70].

Figure 20: the Copeland Forest around 1350[71]



(Source: kind permission from Winchester, 2004: 24)

Between 1300 and 1800 six phases of intake development along the valley floor and sides have been identified. Above the fell wall (the uppermost wall of the intake) commons grazing

[67] Armstrong cited in National Trust (2000)
[68] National Trust (2000)
[69] Cumbria Archives Service Catalogue entry code: DLEC Accessed: 31/10/23
[70] Pers. Comm. AJL Winchester 31/10/23
[71] With kind permission of AJL Winchester (2004:24)

developed from at least 1578[72] with cattle confined to the lower flatter slopes managed by a manorial court. By the 16th Century sheep had overtaken cattle as the predominant livestock in Wasdale underpinned by war, recurrent Black Death outbreaks (1348, 1361 and 1362), famine and climate change of the 14th Century. Land rental accelerated for peasants and the period saw the origin and development of what were known as 'statesmen' yeoman farmers in the Lake District, as feudalism made way for a more capitalist economy.

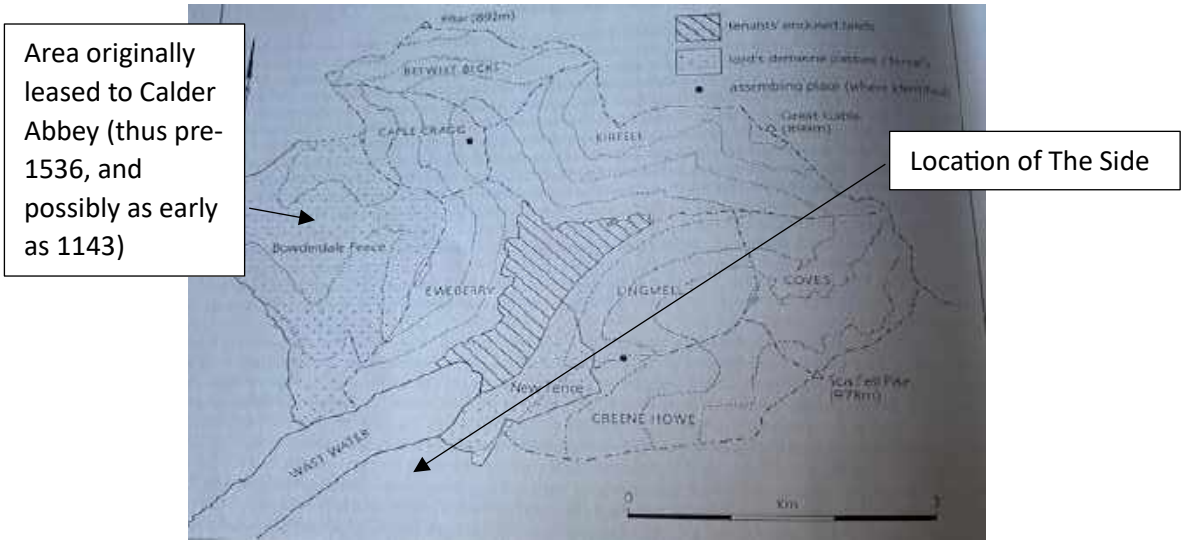
By the time of the Percy (Earl of Northumberland) Survey of 1578 most of Copeland Forest had disappeared as pressure for grazing and other resources, such as peat and bracken, had taken over. The deer had been emparked at Wasdale Head, enclosed by a stone wall and Manor Courts began to exert jurisdiction over the use of the land. Lower areas such as around Nether Wasdale had been allocated to cattle and the higher fells above Wasdale head for sheep with a gradual transition towards the hefting system now valued as part of World Heritage status[73].

Particularly relevant to this study is a one-off Manor Court record dated 1664 which identified the boundaries of seven heafs (hefts), as shown on Figure 21. When compared to the contemporary hefts (Figures 22 and 23) several still follow the same boundaries notably:

- Row Head 1 (2023) following the Eweberry heft (1664)
- Wasdale Head 1 (2023) following the Bowderdale Fence (1664)
- Row Head 2 (2023) following Lingmell (1664)
- Wasdale Head 2 (2023) following The Side, which dates from at least Dissolution possibly as early as 1142).
- Unknown area to the east of Row Head 2 (2023) aligning with Coves (1664)

In contrast, Kirk Fell has become divided with part of it merging with Cape Cragg and Betwixt Fells to form Row Head 3 in 2023.

Figure 21 – Boundaries of Wasdale Head Hefts in 1664[74]



[72] National Trust (2000:
[73] OA North (2009: 25)
[74] With kind permission from Winchester AJL (2000: 168)

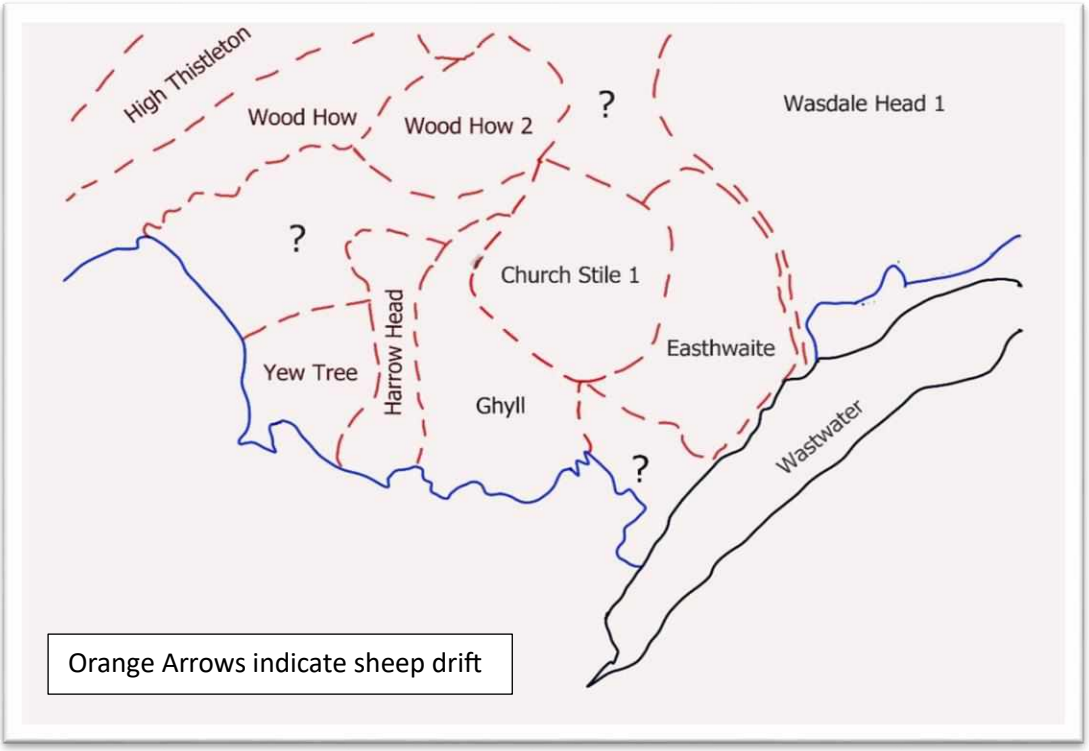


Figure 22 - Hefts, southern Nether Wasdale Common 2023

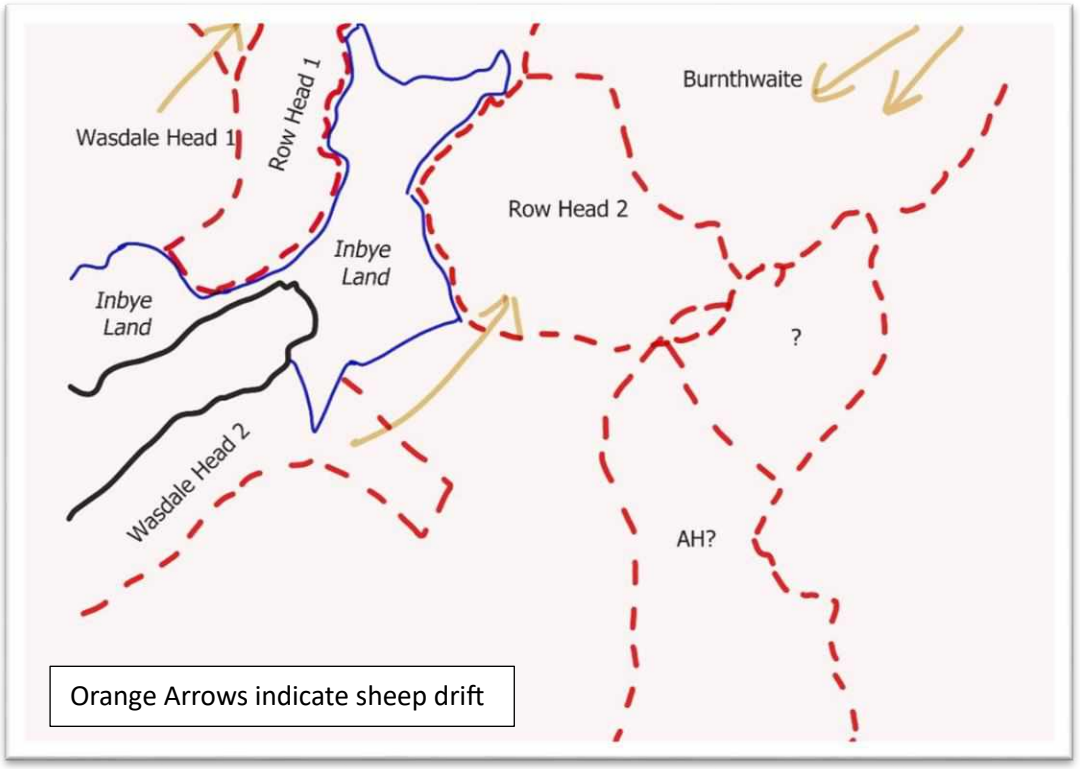


Figure 23 – Wasdale Head Hefts 2023

Many farms were abandoned, and others amalgamated into larger properties during the latter half of the 17th Century and into the 18th C due to depopulation. The Earls of Northumberland still retained land in Wasdale until 1748, when the estate passed by descent to the then Duke of Somerset, later the 1st Earl of Egremont. In 1750 the land passed to the Wyndam family, later the Barons' Leconfield and Egremont, with whom they remained until this century[75].

Whilst Parliamentary Enclosure covered much of England between 1730 and 1840, Wasdale Head did not undergo such a process [76]. Instead, enclosure piecemeal occurred through private agreement between landlord and the fell graziers, seemingly to reduce grazing pressure and, erosion on parts of the common around 1800 [77] and therefore, enclosure walls sprung up in Mosedale. Nevertheless, it is important to establish here that land above the fell wall in Wasdale, like much of the Lake District, has never been enclosed and thus this can be classified as an Ancient Landscape [78].

Tithe Maps[79] from 1839 also show that the valley floor area around Wasdale Head was not always pasture as it is today. Arable crops were cultivated in many inbye and intakes with evidence of earlier ridge and furrow ploughing in some of the latter[80]. It is conceivable that the switch to pastoral systems in these areas occurred during the Agricultural Depression (1875 to 1945) when competition from lowland farmers undercut prices upland farmers could get[81]. To overcome this, and given the local circumstances, farmers probably opted for a combination of increased stock numbers, reduced labour or even de-intensification of permanent pasture to rough grazing, the summative impact of which was the expansion of bracken[82].

It is possible that the reduction in rents from graziers added to the impetus for Lord Leconfield to pass on the summit of Scafell as a war memorial in 1920 to the National Trust, followed by more land between 2000 and 3000 feet in 1925. Other land (parts of Kirkfell, Great Gable and Lingmell) was acquired using funds from the Fell and Rock Club. This land continues as freehold land to the current day.

In contrast, Nether Wasdale Common continued to be managed as a common by a manor court until the 1930s[83], when that system disappeared in Cumbria. After a hiatus of over fifty years, a commoners association was established in 1985, the same year that the SSSI was designated.

In relation to the farms at Wasdale Head;

[75] National Trust (2000) and DLEC (2024)
[76] Overton (1996)
[77] National Trust (2000: 4)
[78] Hoskins (1980)
[79] Tithe map – a map of the owners and occupiers of land in a parish. Tithes, or one tenth of produce, had been paid in goods since before 1066 to the church, but on Dissolution many private landlords became the beneficiaries. In 1836, through the Tithe Commutation Act, tithes could be paid as cash and not goods.
[80] National trust (2000: 42)
[81] Mansfield L (2011: 91 to 94)
[82] Mansfield (2011) and Moore-Colyer (1998)
[83] Winchester AJL (2022) '10 Nether Wasdale Common, Cumberland' 00215 to 221 in: '*Common Land in Britain'* Boydell: Woodbridge

> '*Middle Row Farm (now part of the Row Head Farm tenancy) and Wasdale Head Hall Farm were transferred to the National Trust in 1959 through National Land Fund procedures. Row Head Farm was purchased in 1963 and Burnthwaite Farm in 1975. Smaller areas of bare land were also purchased in 1963 and 1975. Wastwater itself came to the National Trust from Lord Leconfield via National Land Fund procedures in 1979*.' [84]

In Nether Wasdale,

> *'Various parcels of land and properties formerly of the Wrigley Estate were acquired by the National Trust in 1965, including Hollins, Thistleton Farm, Bengarth, Kidbeck, Burnt House, and Stangends … as well as being gifted Ghyll and Buckbarrow farms, along with Harrowhead….. Finally, Bowderdale Farm was acquired from the Lodore Estates in 1999).*[85]

Today the National Trust owns roughly 22,800 ha in a block covering most of Wasdale, Wastwater (289 ha), its surrounding fells and north towards Ennerdale, south to Eskdale and east up to Scafell Pike. It is important to recognise that the other farms are privately owned holding common rights related to other landlords in the Nether Wasdale area, freehold land or owned outright.

In summary, the contemporary Wasdale farmed landscape, the families who own or manage it are the custodians and stewards of a rich archaeological and historical legacy stretching back six thousand years. An integral part of Wasdale's cultural heritage is the continuity of hill farming, unfortunately it faces a range of contemporary drivers and trends which are placing pressure on the system.

7.2 Recent Drivers and Trends

A range of drivers and trends have coalesced over recent years which increase perceived or real challenges for farming in Wasdale. Drivers include: general economics of hill farming; the availability, or lack thereof, of grant support for cultural and social capital; national park designation; World Heritage Status. Trends evolving revolve around the decline in hill farming and impact of increased tourism. The existential crisis of climate change is also critical as it will affect livestock and fodder viability.

Driver: The Economics of Hill Farming

Upland and hill farm management systems have flexed response to economic factors such as high production costs, low sale prices or lack of labour, as well as changes in produce demand. Meat and/or fleece price fluctuations can lead to huge swings in farm profits year on year due to the laws of supply and demand[86]. Fifty years ago, the June clip from sheep flocks would pay the land rent and wage bills for the year, now farmers are lucky to get £1 per fleece, in many cases less.

[84] National Trust (2000:29)
[85] OA North (2009:7)
[86] Mansfield (2011) Chapter 6.

Arguably modern capitalist economics of agriculture have distorted the balance in many SES, and upland hill farming is no different[87]. As costs of production have risen, lower profit margins have generally forced farmers to either intensify production (resulting in a range of environmental problems such as overgrazing and loss of biodiversity) or diversify their business activities to keep pace with this. Neither are ideal. The first eventually degrades the agricultural resource and often brings them into direct conflict with other stakeholders with other objectives for uplands, which agricultural activity can negatively affect.

Simultaneously, there has been a drive to address environmental impacts of farming through several iterations of agri-environment schemes over the last forty years (since 1993 with the Lake District Environmentally Sensitive Area Scheme). One of the main prescriptions has been the reduction of fell livestock, which has directly undermined the operation of the hill farming system (a thread throughout this report). Conversely, improved environmental management can enhance the resilience of upland farming systems to climate change, reducing the risk of crop failures and livestock losses. Additionally, these schemes can contribute to the development of niche markets for sustainably produced agricultural products, potentially fetching higher prices for farmers. Overall, while there may be short-term economic trade-offs, the adoption of agri-environmental schemes in upland farming holds promise for fostering economically viable and environmentally sustainable agricultural practices in the long term.

Whilst diversification sounds like a panacea, many upland farming businesses struggle to adopt such activities for a variety reasons. Inherent limitations in enterprise mix, lack of capital to invest, lack of time and labour, risk aversion, neighbouring competition and lack of opportunities are but some of the challenges faced. In fact, a recent farm survey for the Lake District World Heritage Site[88] showed diversification is only contributing between 15 and 22% of a farm business income, much lower than previously reported despite a recognition that farming businesses will need to restructure.

Driver: Grant Support for Cultural and Social Capital

Since the designation of the Lake District Environmentally Sensitive Area (ESA) in 1993, a plethora of voluntary opportunities have been available to farmers to access funds to develop or improve farm assets (eg. Moorland Scheme, Countryside Stewardship and Environmental Stewardship)[89]. Most of these have focused on biodiversity. Elements of these grants have had some cultural value particularly those which enhance the landscape *per se*. Examples include: barn restoration, drystone wall maintenance, permitted access and footpath furniture. All of these have been welcome; however, it is important to point out that these grants have either been through match funding or via profit foregone[90] both of which are contentious payment mechanisms. Other

[87] Mansfield (in prep).
[88] Mansfield & Locke (2023)
[89] Mansfield (2011) Chapter 8.
[90] Match funding – a percentage of the cost is provided and the farmer is expected to find the rest of the cost from other sources. Profit Foregone - a farmer is paid a grant of which value is equivalent to the loss in income they would have accrued if they had continued to farm normally.

elements of these grants were based on a calculated 'going rate' to undertake the work, here the most challenging has been, until 2023, the rate paid for drystone walling when it was increased.

Cultural and social capital opportunities were instead mainstreamed through the EU LEADER programme which was very successful in the Cumbria Fells & Dales area[91], the Wasdale village hall renovation being one such project. Diversification or added value to products which reflected cultural heritage were derived from the farm came from business development grants either via LEADER (2001 to 2020) or specific pots such as Countryside Productivity Scheme, although the minimum application threshold was often out of reach of many hill farming businesses, as it too operated a match funding process.

Current grant opportunities include:

1) Roll over of Countryside Stewardship (CS) [92]
2) Sustainable Farming Incentive (SFI) [93]
3) Farming in Protected Landscapes (FiPL) [94]

Whilst CS and SFI focus on biodiversity management, FiPL, with four themes (place, people, climate, and nature) provides cultural development opportunities. Regarding Wasdale two key developments have been:

1) Support for West Lakeland CIC[95], of which this cluster of Wasdale Farmers form's part.
2) Development of a Wasdale tweed by *'Shear delight',* part of the Dodgson Wood brand[96]

Driver: National Park Designation

As England's largest national park, the Lake District covers 912 square miles (2362 sq. kilometres). Designated in 1951, the Lake District National Park Authority's statutory purposes are:

- To conserve and enhance the natural beauty, wildlife, and cultural heritage of the Lake District National Park; and
- To promote opportunities for the understanding and enjoyment of the special qualities of the National Park by the public.

It also has a duty in pursuing those purposes:

- To seek to foster the economic and social well-being of local communities within the National Park by working closely with the agencies and local authorities responsible for these matters, but without incurring significant expenditure.

Section 62 of the Environment Act 1995 makes clear that if National Park purposes are in conflict, then conservation must have priority. Known as the 'Sandford Principle' constituted in 1974,

[91] Banford (2018) 470-491
[92] Countryside Stewardship
[93] Sustainable Farming Incentive
[94] Farming in Protected Landscapes which is administered by the Lake District National Park Authority
[95] West Lakeland CIC
[96] https://sheardelight.co.uk/ and https://lakedistricttweed.com/ Accessed: 09/02/24

National Parks 'will leave their natural beauty unimpaired for the enjoyment of this and future generations'. As one of the thirteen main valleys in the National Park, Wasdale is probably one of the most recognised landscapes in the Lake District with its steep sides, deep lake, and scree slopes. It is these geomorphological features form the inspiration behind the Lake District's National Park logo (Figure 24).

Whilst the cultural value of Lake District National Park life is recognised through its Special Qualities there has been a long history of cognitive conflict[97] between farming and conservation., As a cultural landscape, the inscription of the Lake District as a World Heritage Site could address some of this contention.

Figure 24 – Lake District National Park Logo

Figure 25 – Branded WHS logo for Farming

Driver: World Heritage Status

Recognised in the Lake District's Outstanding Universal Value statement, hill farming is the fundamental driver of World Heritage inscription in 2017 under Criterion (ii) and (v) of the 1972 World Heritage Convention of UNESCO[98]:

> '*The English Lake District is a self-contained mountainous area in North West England of some 2,292 square kilometres. Its narrow, glaciated valleys radiating from the central massif with their steep hillsides and slender lakes exhibit an extraordinary beauty and harmony. This is the result of the Lake District's continuing distinctive agro-pastoral traditions based on local breeds of sheep including the Herdwick, on common fell-grazing and relatively independent farmers. These traditions have evolved under the influence of the physical constraints of its mountain setting. The stone-walled fields and rugged farm buildings in their spectacular natural backdrop, form an harmonious beauty that has attracted visitors from the 18th century onwards*.'

Central to this inscription is the need to retain integrity and authenticity regarding the Lake District. In this respect, Wasdale is one of thirteen valleys exhibiting these two traits[99], but there are risks to maintaining both elements. Along with the impact of long-term climate change, economic pressures on the system of traditional agro-pastoral farming, the loss of agricultural

[97] Cognitive conflict – the way in which one group of individuals perceive an issue from their own knowledge and understanding which may be at odds with another group.
[98] UNESCO WHS inscription database: https://whc.unesco.org/en/list/422/ Accessed: 29/01/24
[99] Lake District National Park Authority (2015a)

subsidies from Brexit and changing agri-environment schemes threaten to undermine the resilience and economic sustainability of hill farming.

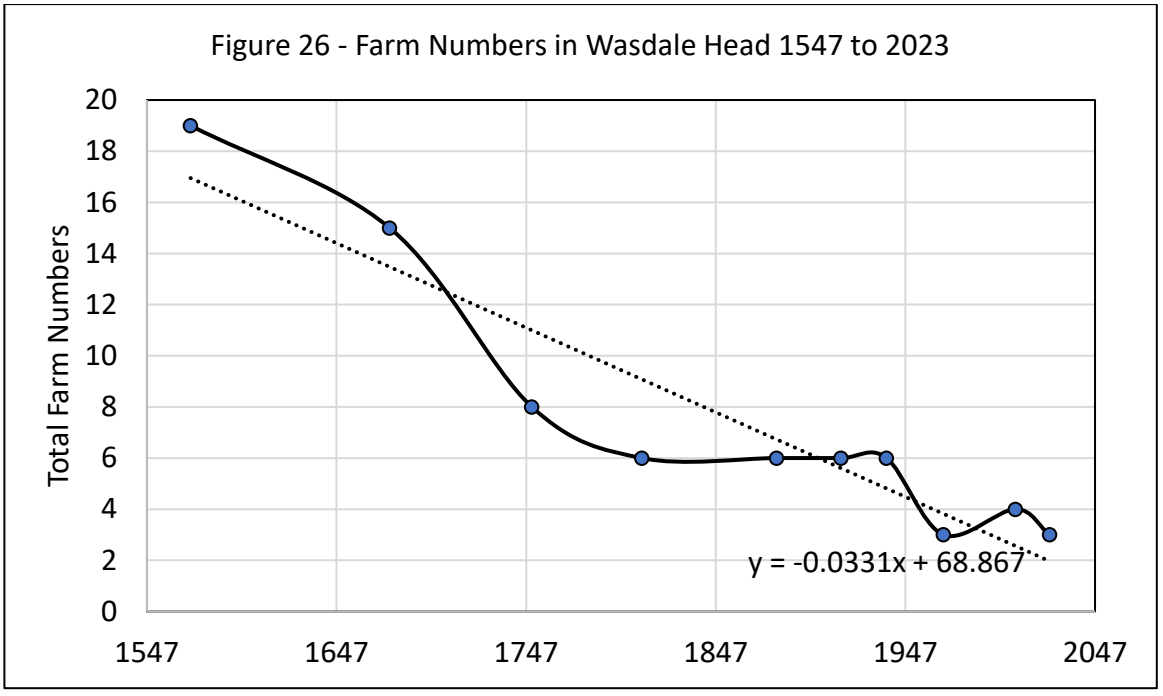
Trend: Decline in Hill Farming

One of the biggest concerns for Wasdale in relation to recent trends is the decline in hill farming in totality, there is particularly concern amongst the Wasdale Head farmers. Analysing Shepherds guides gives some indication of numbers of farms and hefted flocks operating.

Based on a representative number of Guides we were able to gather in the survey period (6)[100], along with data from the National Trust Archaeological report for Wasdale[101], we have been able to present some tentative forecasts based on historical and current trends.

a) Farm Numbers in Wasdale Head from 1547 to 2023

Figure 26 shows there has been a gradual decline in farmsteads at Wasdale Head over the last five hundred years. Extrapolating forwards suggests that all the farms will be gone by around 2090 unless action is taken.



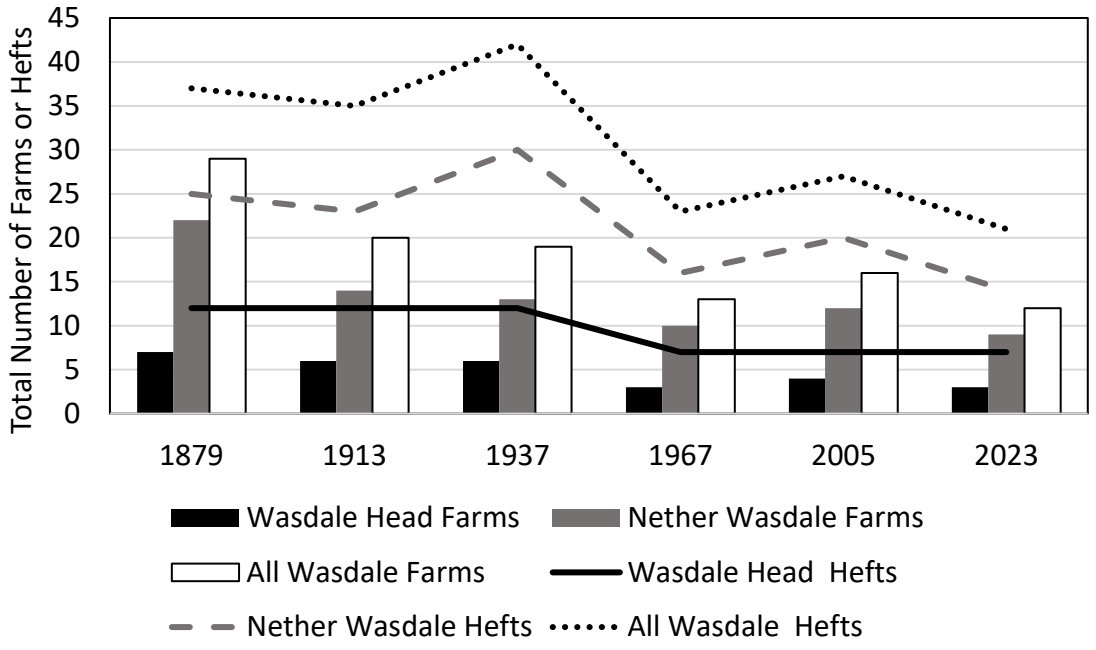
[100] Much thanks to Amanda Carson for analysing the Shepherds Guide data by heft (1829, 1879, 1913, 1937, 1967, 2005 and 2024)
[101] National Trust (2000)

b) Farm and Hefted flock numbers 1879 to 2023

Figure 27 shows the number of farms has declined in both parts of Wasdale. In 1879 there were 29 farms in the whole valley, this has now dropped to 12, a reduction of nearly 59%. This decline has been proportionally the same in Nether Wasdale and Wasdale Head.

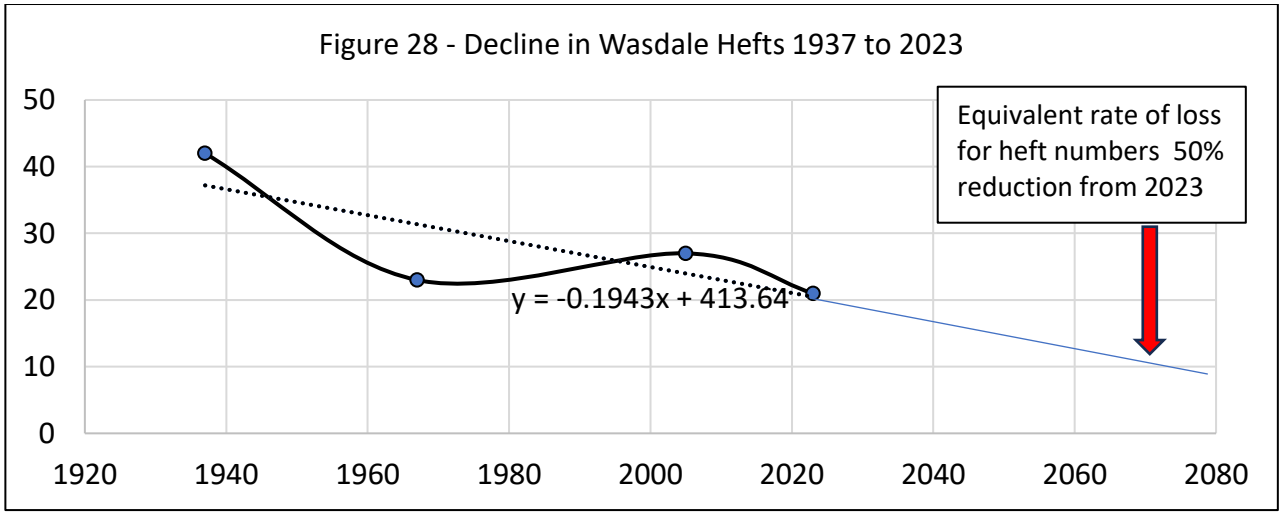
(NB. The 1829 version only recorded a few flocks based around Wasdale Head so has been removed from this part of the analysis)

Figure 28 - Changes in Farm and Heft Numbers, Wasdale 1879 to 2023



In relation to hefts, 1937 records the greatest numbers in both areas. Between 1937 and 1967 there was a substantial decline, with a small recovery by 2005 only to drop again by 2023. The overall decline in hefted flock numbers over the period is 50%. If hefts are lost at a similar rate, we are looking at hefting reducing by another 50% in Wasdale by 2070 (to 10 hefts) (Figure 28).

However, it is unlikely this point will be reached as the reduction in stocking rates required by current Agri-Environment Schemes and other drivers will have already led to system collapse, unless a better balance between competing demands and farm business resilience is developed.



The inability to effectively manage a rural landscape comprising large areas of common property resource[102] with too few participants is not unusual. Similar challenges exist, for example in Japan, where communal water course management for agriculture ceases to function when the number of families operating the systems drops below eleven[103].

One of the challenges has been to demonstrate the scale of reduction in sheep numbers in any upland. For Nether Wasdale Common records from the 1965 Commons Registration Act give a figure of 8535 sheep-equivalent grazing rights. An agreed reduction of 841 occurred between 1999 and 2002[104]. This number reduced again through a ten-year ESA agreement limited numbers to 1.5 ewes/ha (around 3190 ewes with possibly as many as 2000 lambs at foot). In 2011, the ESA scheme as replaced by a Higher-Level Stewardship Scheme which took the numbers down to 1.2 ewes/ha, about 2425 head).

Recently, Natural England in Cumbria have been pushing to reduce upland flocks to lower numbers still across the Lake District fells, arguably to improve the biodiversity, to 0.5 ewes/ha. For Nether Wasdale Common this would mean about 1050 ewes as a maximum. Consequently, between 1965 and 2024, the decline it stock numbers could equate to an 87% if a new agri-environment scheme is signed for the new stocking rate (Figure 29). this would also impact negatively on the National Trust's own landlord flocks as well as tenant's own flocks. Genetic diversity could become an issue within the Herdwick national flock; if this trend repeats itself elsewhere, as well as threatening the breed's survival too.

[102] Common property resource – a resource which can be freely consumed or enjoyed by anyone, but the use by one person diminishes their availability to others. In the case of Japan it is water, for Wasdale it is forage for grazing, hence the development of the hefting systems which limits the geographical area inhabited covered by each graziers flock.
[103] Mansfield (2019b)
[104] Winchester (2022)

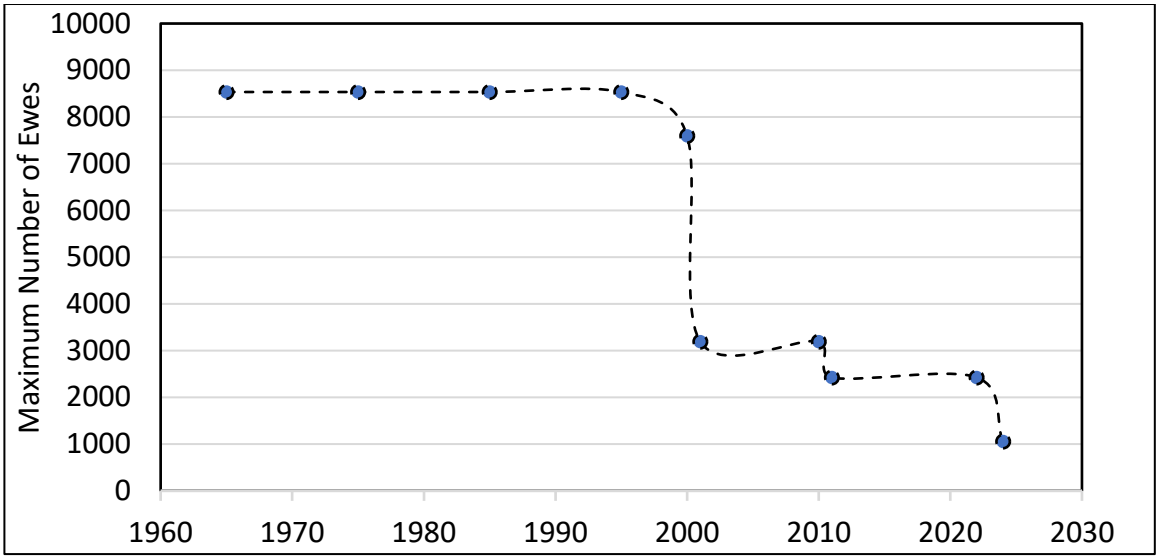


Figure 29 – Reduction in Stock Number on Nether Wasdale Common 1965 to projected 2024.[105]

For Wasdale the combination of active graziers on commons, the amount of livestock per heft and common, plus the overall size of the common land block will all combine to determine whether the hefting system will collapse.

Trend: Increased Tourism

A prominent catalyst for change within the Wasdale farming system is the mounting pressure of tourism. This phenomenon has had both positive and negative impacts on the community, but the prevailing challenges have intensified with the growing interest in the region.

On the positive side, five of the interviewed farmers have initiated diversification ventures to capitalise on the increasing number of tourists frequenting the area. These ventures range from small-scale retail units to bed and breakfast accommodation and large camping facilities. Participants perceive these endeavors as opportunities to diversify their businesses, shielding them from fluctuations in livestock prices and evolving agricultural subsidy arrangements.

Conversely, negative effects are concentrated around the most heavily visited sites, particularly those in and around Wasdale Head. Although numerous examples were provided, several key issues emerged. Firstly, congestion on the access roads adjacent to Wastwater becomes severe during peak tourism periods, hindering farmers' ability to traverse the valley and access external resources. Secondly, the surge in visitors seeking access to popular walking routes within the valley, notably the route up to Scafell, has significantly impacted farms along these routes. The high volume of walkers passing through farmyards or on the freehold fell associated with these farms disrupts daily operations and compromises privacy. Moreover, queues of walkers on the fells impede gathering operations, as the presence of large groups startles livestock and disrupts gathering processes, necessitating intervention from National Trust staff in extreme cases.

[105] Data taken from Winchester (2022) and Natural England's desired stocking density of 0.5 ewes/ha.

Furthermore, the influx of tourists has fueled an increase in antisocial behaviour within the area. Farmers have reported break-ins and verbal abuse, while damage to crucial infrastructure such as drystone walls has escalated due to tourists climbing on them to take shortcuts. The growing interest in 'wild camping' has exacerbated the issue of unwanted waste, including litter and human waste, on farms and fells; thus ‘Wasdale Wombles’ climb Scafell daily to remove litter.

Although farmers acknowledge the importance of people enjoying the unique landscape of Wasdale, they advocate for sustainable visitor levels that do not excessively disrupt farm operations. Education of visitors is deemed essential, as many issues stem from a lack of understanding regarding the repercussions of their actions on the local community. Whilst there is increased signage about no camping or parking etc., this does detract from the visitor experience.

In conclusion, the burgeoning tourism industry in Wasdale Valley presents both opportunities and challenges for the local farming community. While some farmers have embraced diversification to leverage the influx of tourists, others grapple with the adverse effects of increased visitor numbers on their daily operations and the surrounding environment. Addressing these challenges requires a delicate balance between promoting sustainable tourism and preserving the integrity of traditional farming practices. Education and awareness among visitors about the impact of their actions on the local community are crucial steps toward achieving this balance. By working collaboratively with stakeholders (National Trust, LDNPA) and implementing measures to mitigate negative impacts, Wasdale can continue to thrive as a destination for visitors while safeguarding its agricultural heritage for future generations.

Figure 30 – Harrow Head Farm, Nether Wasdale

8. Tangible Cultural Capital

With respect to Wasdale the tangible cultural capital in the form of archaeological and historical heritage has already been covered in Section 7, much of which has been derived from the comprehensive Historical Landscape Surveys by the National trust and OA North. This section therefore focuses on existing tangible cultural capital on both the six National trust farms and the five privately owned farms who engaged with this project.

On overview of linear features, hefts, Wasdale Show and Shepherds Meet, Shepherds Guides and recreational infrastructure are included here.

8.1 Linear Features

Existing linear features which enhance the cultural capital of Wasdale include: drystone walls; hedgerows and hedgebanks.

Drystone Walls

The Drystone walls of Wasdale Head and Nether Wasdale produce some of the most iconic images of the Lake District (Figure 31).

Figure 31 – Wasdale Head Walls looking SW (Copyright: Andrew Locking)

Networks of multi-age walls built by successive generations of Wasdale farmers over two thousand years form a distinctive early field system as part of World Heritage status in this valley. Given the longevity of wall management in Wasdale, the farms show a wide range of styles related to different cultural periods. Walls can be made direct from river cobbles or broken angular pieces (Figures 32). Devoid of cement, the skill comes from building two wall skins and holding together by interlocking the stones, filling the void with coarse rubble

(heartings) and binding the two walls with large slabs (throughs) at ninety degrees to the wall line (Figure 33).

Figure 32 – The Use of River Cobbles

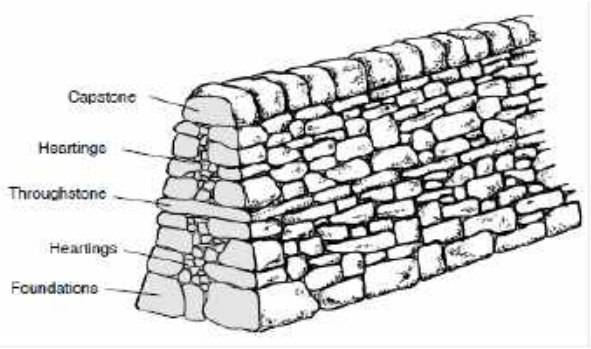


Figure 33 – Internal Structure of a Wall

All farms in this study have drystone walls. The three Wasdale Head farms account for 39% of walls reported in this survey, with the remaining eight 61%, thus the Wasdale Head farms manage proportionally more walls than the Nether Wasdale farmers.

In total, the eleven manage an impressive 109 kilometres of walls between them (Figure 34). Concentrations of walls are particularly found at Row Head (Wasdale Head), representing the largest proportion of walls (18%) and Ghyll Farm (Nether Wasdale) with 15% (Figure 35). Harrow Head and Wood How have the smallest length of walls.

Hedgerows

A second linear feature common in Wasdale are hedgerows, they run for nearly six kilometres with the majority concentrated on Easthwaite, Church Style and Brunt House (Figure 36). Collectively these three represent 74% of the total). Some of the farms have no hedgerows (Burnthwaite, Bowderdale and Yew Tree) reflecting the uniqueness of each. Hedges are layed using a Westmorland style (Figure 34), rather than the Cumberland one found further north.

Figure 34 – Hedgelaying using Westmorland style

Figure 35 - Length of Drystone Walls in Wasdale Study Area

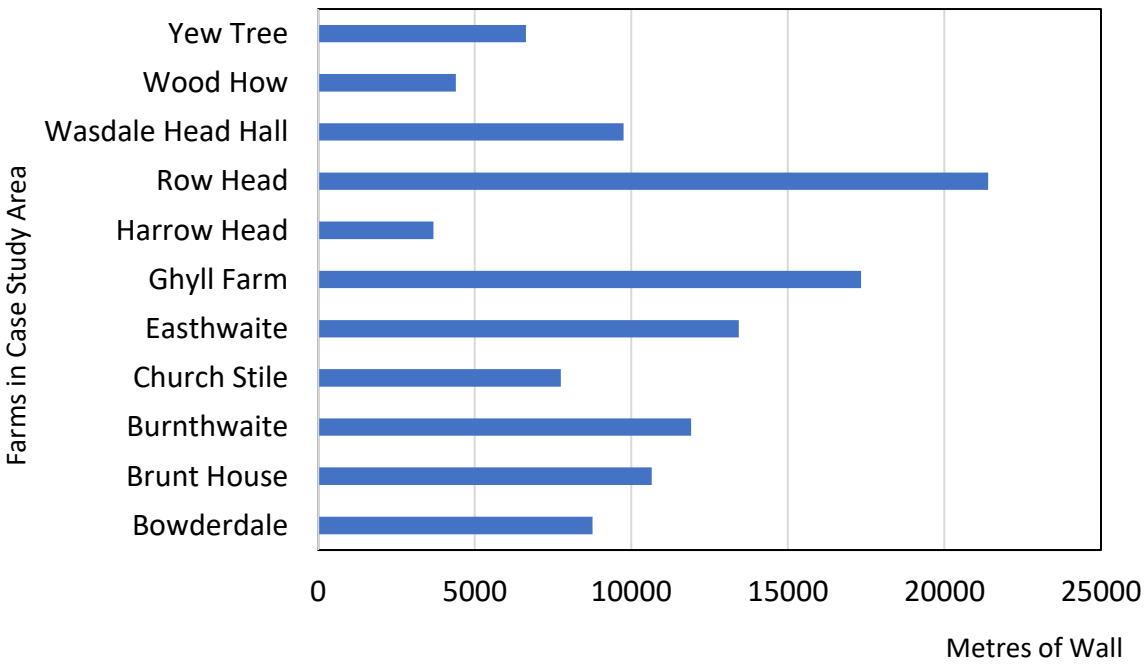


Figure 36 - Percentage of Drystone Walls in Wasdale Study Area

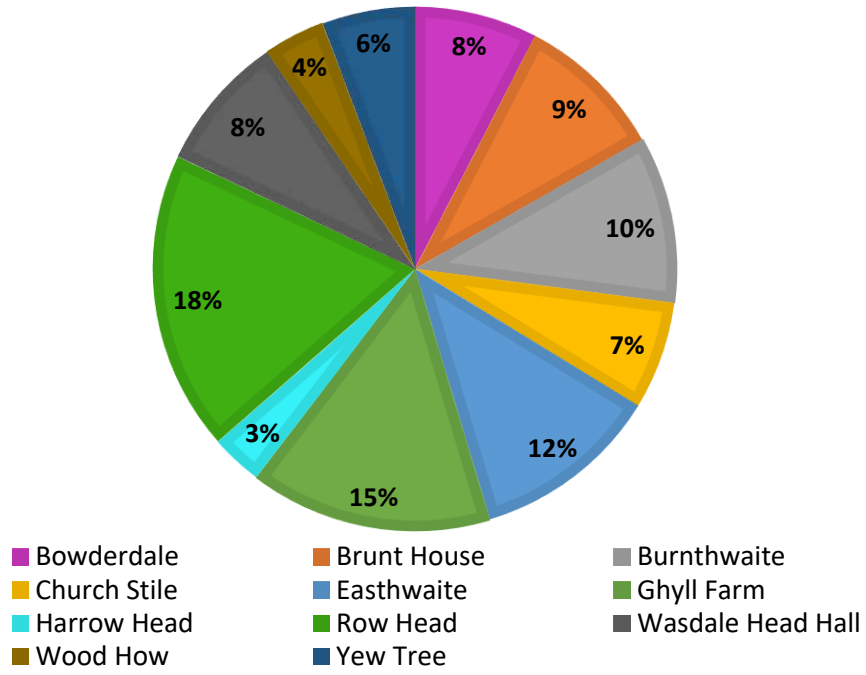


Figure 37 - Length of Hedgerows and Hedgbanks in Wasdale Study Area

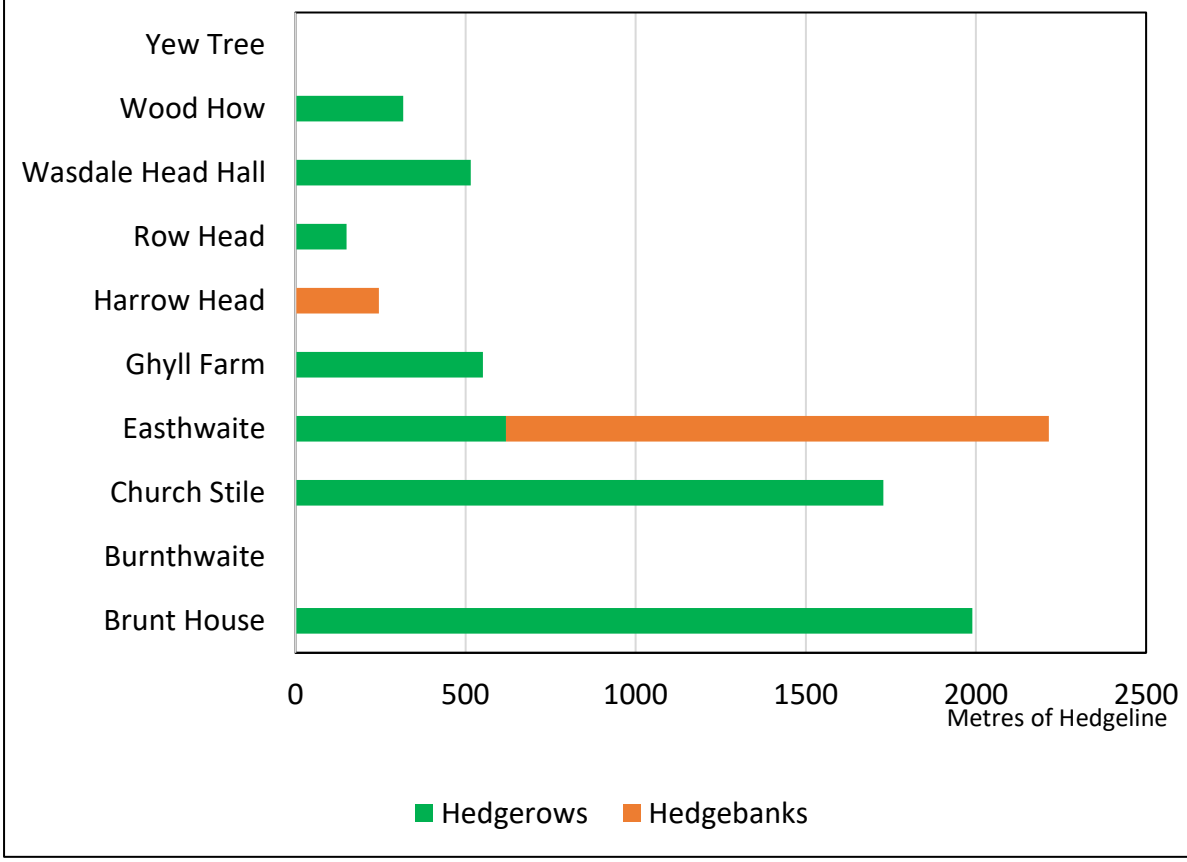
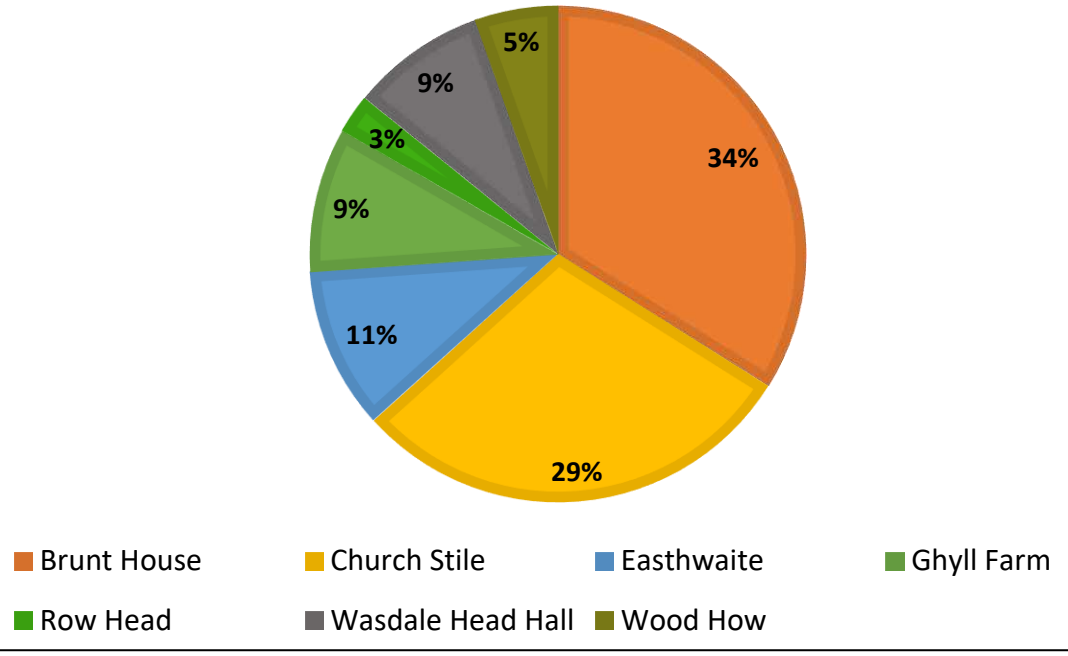


Figure 38 - Percentage of Hedgerows by Farm in Wasdale Study Area



8.2 Hefts

The status of traditional hefts emerged as a prominent concern among all interviewed participants. Across the broader valley, hefted flocks were observed to be facing pressure, albeit with local variations. Notably, the Nether Wasdale common hefts were primarily intact, yet challenges arose due to restricted overwintering numbers stipulated by Natural England (NE). Some graziers with smaller holdings experienced reductions in their sheep allowances for winter grazing, rendering such periods less economically viable. Consequently, these reduced winter numbers often transitioned to larger graziers, whose economies of scale made winter grazing feasible.

Conversely, the freehold fells surrounding Wasdale Head encountered more significant difficulties, characterised by widespread breakdowns in traditional hefts. Various factors contributed to these issues, with notable impacts including stock reductions and off-wintering practices both within Wasdale and neighbouring valleys. NE agri-environmental schemes necessitating widespread stock reductions led to sheep roaming beyond their traditional hefts in search of richer grazing areas (Figure 39, earlier Figures 22 and 23). This undermined the purported benefits of stock reduction efforts, as sheep continued to graze on areas designated for protection despite reduced numbers in their traditional hefts.

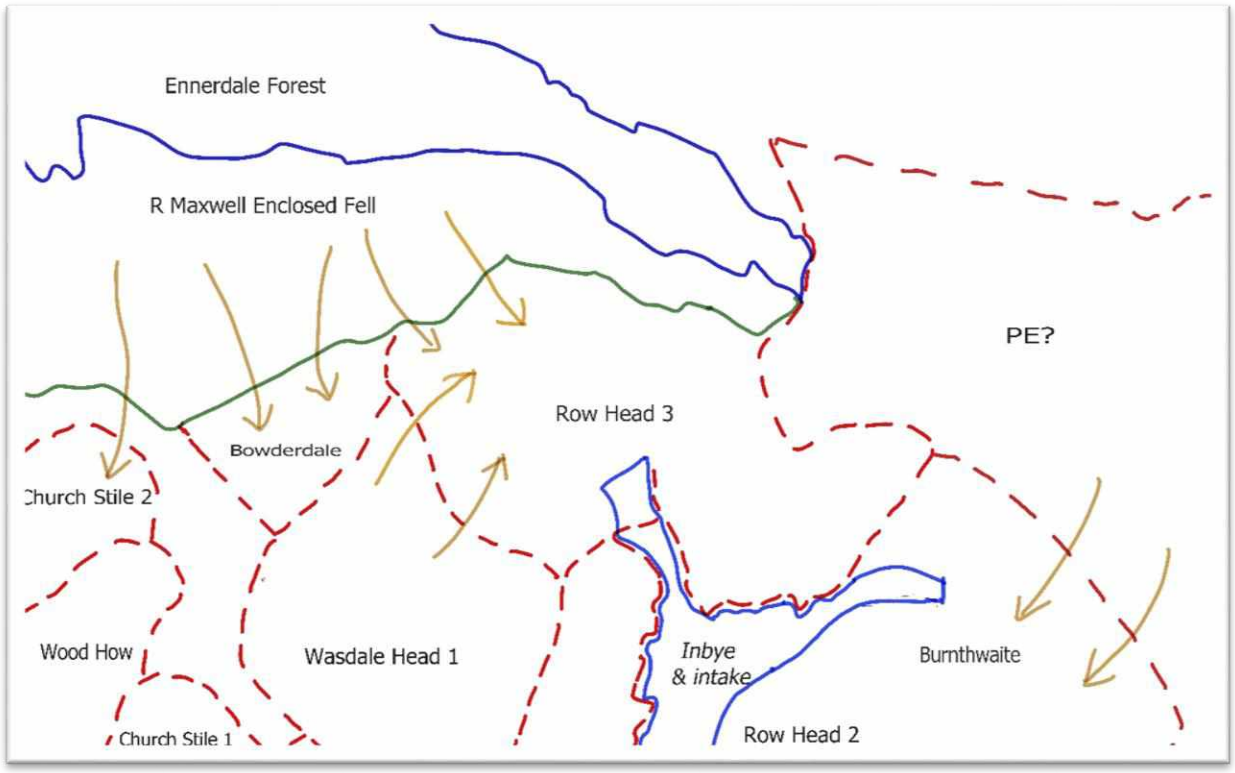


Figure 39 – Hefts: Northern Nether Wasdale Common and Wasdale Head, 2023

Additionally, off-wintering agreements exacerbated the fragmentation of hefts, offering potential financial gains to farmers but diminishing the ability to maintain traditional hefting practices, especially with a significant rise in ewes bearing twins. These ewes and their

lambs, unable to return to the fells in spring, contributed to a diminishing cycle where fewer ewes were reintegrated into traditional hefts, eroding the collective knowledge base.

The destabilisation of hefts imposed increased workloads and time commitments on farmers. Gathering sheep became more challenging and time-consuming, as they ranged over larger or unfamiliar areas of the open fells. Returning strayed sheep to neighbours is also consuming more and more time and effort (and increases carbon footprint). Furthermore, off-wintering practices were identified as undermining the community-based systems of upland management. Traditionally synchronised in their operations and systems, farmers in the valley now operate under different schemes, hindering the coordination of communal activities and limiting the benefits of shared labor and resources.

In conclusion, the challenges facing traditional hefts in the valley, from restricted overwintering numbers to the fragmentation caused by stock reductions and off-wintering practices, pose significant threats to the long-standing practices of upland management. The erosion of collective knowledge and the breakdown of communal gathering and labor underscore the broader implications of these changes. Addressing these challenges will require a nuanced approach that balances biodiversity conservation objectives with the preservation of traditional farming practices, ensuring the sustainability of both ecological and cultural landscapes in the uplands. Collaboration between stakeholders, including farmers, conservation organisations, and regulatory bodies, will be essential in navigating these complexities and finding solutions that uphold the resilience and vitality of the upland ecosystems and communities for generations to come.

8.3 Wasdale Show and Shepherds Meets

The farming community in Wasdale come together three times a year for two key events. The Wasdale Shepherds Meet & Show[106] occurs once a year on the second Saturday in October and two Shepherds Meets happen on the nearest Saturdays to 20th July and 1st December.

Historically, Shepherds Meets where conducted as a mechanism to allow farmers and commoners to switch back stray sheep mis-gathered as part of another common's gather. Meets also provided business opportunities and socialising [107].

Originally, farmers would walk the mis-gathered sheep across the fells to the Meet, nowadays modern communications, improved roads and lorries allow more rapid exchanges of livestock meaning people do not have to wait until a Meet date. Consequently, over time the need for a Meet has diminished substantially across the Lake District (Table 6). This has been exacerbated by overall reduction in flock numbers and a decline in farm numbers.

Since 1937 there has been a 76% reduction in Meets, with now only four remaining, two of which are in Wasdale. The two meets in Wasdale therefore are a crucial element of retaining this cultural tradition.

[106] https://www.wasdaleheadshow.co.uk/sports Accessed: 08/02/24
[107] Brown (2006: 56-58)

Table 6 – Occurrence of Shepherds Meets 1937 to Present Day, Lake District [108]

Meet Locations	1937	1967	1985	2023
Skiddaw				
Dockray & Matterdale				
Mardale				
Langdale				
Walna Scar				
Stoneside				
Wasdale		?		
Braithwaite & Buttermere				
Troutbeck (Windermere)				
Total	**17**	**7**	**8**	**4**

In several cases, effort has been switched to running a single valley or area Agricultural Show instead. Show emerged in the late 18th and early 19th Centuries through the formation of new agricultural associations. This was a period of increased application of scientific thought to livestock breeding and the show provided a vehicle to display the 'best' livestock and innovations, as well as a mechanism to disseminate new farming techniques and good practice[109]. Recently, the show as a concept has developed as an opportunity for agricultural associations to focus on; '

> *'… Incorporating 'education' of the public into a mix of business, competition, spectacle and consumption. They are increasingly interested in encouraging non-farming publics to learn and think about farming in particular ways, in presenting a particular image of farming, and influencing current public sphere debates over farming's future. '*[110]

Whilst some shows have become large commercial events, others have maintained their local character and are less commercialised, focusing on providing the local rural population with a social and cultural event as well as the education of visitors of which the Wasdale Head Show is one such.

Originally developed as a shepherd's meet around 100 years ago, where farmers from Wasdale met up with farmers from the adjoining valleys of Ennerdale, Buttermere, Borrowdale, Eskdale and possibly Langdale, it was probably developed to trade, exchange or hire Tips (Rams) rather than a classic Shepherds Meet[111]. The contemporary show provides:

[108] Sources: Shepherds Guides 1937 and 1967; Brown, 2009; Lake District WHS Officer, pers comm).
[109] Overton (1996)
[110] Holloway (2004:320)
[111] https://www.wasdaleheadshow.co.uk/ Accessed: 08/02/24

livestock showing competitions, children's races, Cumberland Wrestling, shepherds' dog and all-comers showing competition, local produce sales, a craft 'tent', fell running competition, vintage classes and static local history displays (Figures 41- 43). The show is supported by its own website[112] and the show committee;

> '*endeavour to maintain the traditions and history of the event but at the same time offer something for everyone'*.

Figure 41 – Wasdale Head Show October 2023

[112] https://www.wasdaleheadshow.co.uk/ Accessed: 08/02/24

Figure 42 – Static Local History Displays

Figure 42 – Local Produce trailer (by kind permission of the proprietor)

Show Surveys

The questionnaires undertaken at the October Show explored the attendee demographics, motivations, and the intricate relationship between the local hill farming community and the breathtaking landscape of the Wasdale valley. They revealed that a significant majority of respondents hailed from the immediate vicinity, with two-thirds residing within a 20-mile radius of the event's location. However, the data noted the presence of attendees from farther-flung areas, including Kent and Scotland, as well as from urban centres like Manchester and Liverpool within the broader northwestern region.

The motivations behind attending the event vary. They were characterised by a strong connection to traditional rural activities. Sheep showing emerges as the primary draw for almost half of the participants, showcasing the enduring importance of agricultural practices in the region. Additionally, the allure of the craft tent attracts a considerable number of attendees, indicating a reverence for artisanal skills and handmade goods. For local farmers, the event serves as not only a platform to exhibit their livestock, but also as a valuable opportunity for socialising with peers and sharing experiences.

Importantly, the questionnaires highlighted the multifaceted significance of the event within the community. It is viewed as a crucial means of supporting local hill farming, preserving traditional practices, and fostering a sense of camaraderie among residents. Furthermore, it serves as a cultural celebration, with attendees from both near and far expressing admiration for the upland way of life and its rich heritage.

The pivotal role of the local hill farming community in the event's organisation and execution is underscored throughout the responses. The Shepherd's Meet and sheep showing are identified as central components, with participants acknowledging the indispensable contribution of farmers to the event's success. Without their involvement, the vast majority of attendees expressed reluctance to participate, emphasising the intrinsic link between the community and the event itself.

The data extends beyond the event to consider the broader role of the local farming community in the area's landscape and culture. Local perspectives highlight farmers as stewards of the land, responsible for maintaining its natural beauty and cultural heritage. Visitors also recognise the farmers' role in providing access to the landscape and preserving traditional practices, emphasising their integral role in sustaining the local way of life.

The landscape of the Wasdale valley emerges as a defining feature of the event experience. Participants express a deep appreciation for its natural splendour, including its lakes, fells, and rugged terrain. The landscape is not only a backdrop for the event, but also an essential element that enhances attendees' enjoyment and serves as a testament to the interconnectedness of the local community and its surroundings.

Ultimately, the questionnaire responses paint a rich tapestry of the symbiotic relationship between the local hill farming community, the landscape, and the cultural traditions of the

region. It underscores the importance of events like these in preserving rural heritage, fostering community bonds, and celebrating the unique character of places like the Wasdale valley.

8.4 Shepherds Guides

The '*Shepherds Guide',* with intrinsic cultural heritage of its own*,* was first published in 1817 and designed to record hefted flock markings (ear and fleece marks), and to which farms they belonged (Figures 43 & 44). Initially a tool for local farmers to identify stray sheep gathered from the fells, Daniel Gate, who collated the 1879 version included an explanation for the uninitiated;

> '*Owing to the greater portion of our mountains being unenclosed, sheep are daily straying away from their heath, and are often taken up by shepherds many miles away from the residence of their owner, and though there are some hundreds of different marks, the party who has taken up the stray sheep can at once find the rightful owner by referring to the 'Shepherds Guide' …*'

Figure 43 - The 1829 Shepherds Guide

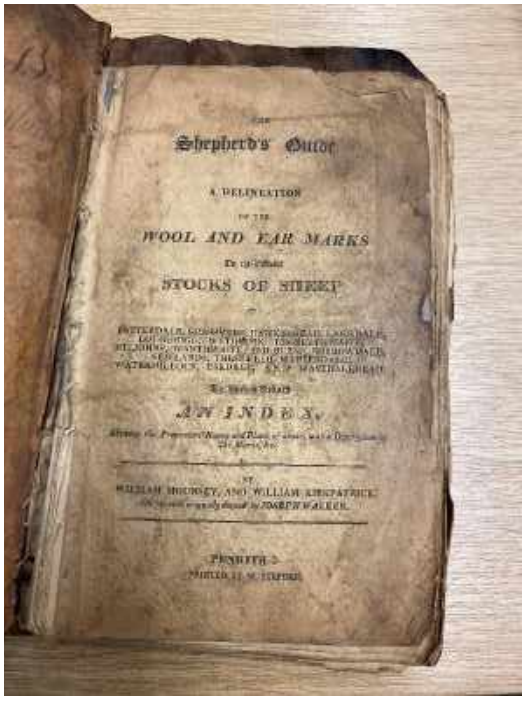
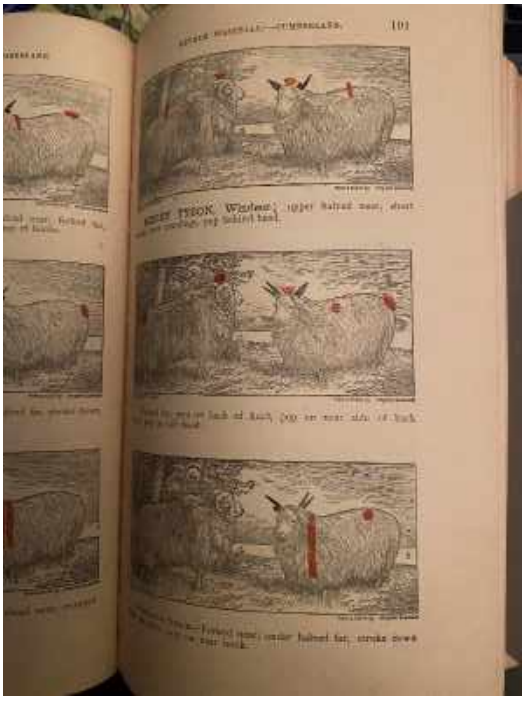


Figure 44 – Example of Flock Marks 1879



In total twelve guides have been published;

1817, 1819, 1829, 1849, 1879, 1913, 1919, 1937, 1967, 1970, 1985, 2005

And this year (2024) sees the publication and electronic formulation of the thirteenth[113].

Whilst the guide has practical value to the Lake District farming community it also demonstrates high levels of bonding social capital, exemplified by the 68 recorders who have given their time voluntarily in the preparation of the 2024 edition.

[113] Project organised by the Federation of Cumbria Commoners and funded by the Lake District Farming in Protected Landscapes Programme

The data extracted from the Shepherds Guides has also provided evidence of hill farming decline in Wasdale (Section 7.2).

8.5 Recreation & Related Infrastructure

There are multiple opportunities for informal and formal recreation in and around Wasdale focused on the internationally well-known peaks of Scafell Pike (978m asl), Great and Green Gable and Pillar. These peaks form a rough topographical horseshoe above Wasdale Head. Kirk Fell is also important as it provides the route for the annual Wasdale Head Show Fell Race.

The landscape provides land and water- based opportunities, but the location's popularity brings a range of recreational pressures for those living and working in the valley, particularly due to the dead-end character of the highways network.

Land-based activities

Supported by a network of footpaths and open access land, walking and cycling are the two most common recreational activities to take place in the area. These include:

Three Peaks Challenge (formal recreation)

The peaks represent the highest points in England, the former being part of the national Three Peaks Challenge[114].

The Three Peaks Challenge connects Scafell Pike to the other two highest points on mainland Britain, *Yr Wyddfa* (Snowdon - 1085m asl) and Ben Nevis, Highland Scotland (1345m asl). The challenge is to climb all three peaks and traverse the 465-mile separation in a twenty-four-hour period, with a total walking distance of 23 miles (37km) and total ascent of 3064 metres (10,052ft). The recommended route to ascend Scafell Pike is from Wasdale Head, many participants arrive at night, thus not contributing to the local economy. With no toilets at Wasdale Head, other waste issues are compounded.

The record remains at 11 hours and 56 minutes, completed by Joss Naylor in 1971, when highway conditions were more flexible. Under today's road conditions completing the challenge in under 20 hours is considered exceptionally quick.

Wainwright bagging (formal recreation)

The Wainwrights are a list of 214 fells and peaks found across the Lake District which are contained within Alfred Wainwright's famous guidebooks: *A Pictorial Guide to the Lakeland Fells,*

[114] https://www.threepeakschallenge.uk/national-three-peaks-challenge/ Accessed: 08/02/24

first published in 1955. The task of *'bagging'* (summitting) all Wainwrights has therefore become *on* a par with 'Munroe bagging[115]' in Scotland.

Wasdale is a key location for Wainright bagging, not only because it contains some of the highest, but because there are two clusters including:

- Scafell Pike, Scafell, Lingmell, Great End, Ill Crag, Broad Crag
- Great Gable, Green Gable, Scoat Fell, Haycock, Red Pike, Pillar, Steeple

As such there are many advertised walking routes to 'bag' these Wainwrights, most of which start from Wasdale Head.

Fell Races (formal recreation)

Supported by the British Open Fell Runners Association (BOFRA), the *Wasdale Head Show Fell Race* takes place during the Wasdale Head Show annually on the second Saturday in October. The route requires runners to ascend and descend Kirk Fell adjacent to the showground.

Two other races are managed by the Cumberland Fell Runners Association[116]; the *Scafell Pike race* held in September with a runner limit of 250, and the *Wasdale Horseshoe* held in July and limited to 300. The latter course is approximately twenty-one miles long with 9,000 feet of ascent. The race includes Whin Rigg, Seatallan, Pillar, Great Gable, Esk Hause shelter, Scafell Pike and Lingmell nose wall. The route is considered to be the toughest of all British fell races.

Marketed Walking Routes (informal recreation)

Given the iconic status of Wasdale as a starting point to ascend England's highest peak (Scafell), there are enumerable published guides with suggested routes in and around the area. Two examples are:

- Youth Hostels Association – linked to the Wasdale Hall YHA[117] which advertises three routes of different level around the Wastwater area:
  - Nether Wasdale
  - Middle Fell, Seatallan and Buckbarrow
  - Miterdale, Eskdale, Illgill Head and Whin Rigg

[115] Munroe bagging – summitting the 282 highest peaks in Scotland (those over 3000ft) identified by Sir James Munroe and published in the Scottish Mountaineering Club's journal in 1891.

[116] http://www.cfra.co.uk/index.php Accessed: 08/02/24

[117] https://www.yha.org.uk/experience/walking-and-rambling-wasdale Accessed: 08/02/24

- A low level accessible walking route around Wastwater & low Wood advertised on the TheLakeDistrict.org[118] website, which also contains walking routes for Scafell Pike

Strava (informal recreation)

Strava™ is an online subscription social network for athletes. Individuals can share workouts, cycling and running routes with anyone else who is a member of the community. Individuals can record their times and as a result, there is a competitive element to the process (Figure 45).

Within Strava the following Wasdale routes are logged:

- Wasdale to Styhead
- Wasdale to Great Gable (3)
- Wasdale to Blacksail pass
- Wasdale Head to Mickeldore
- Pillar from Wasdale Head Inn
- Wasdale to Scafell summit (2)
- Wasdale Head to Kirk fell summit (4) of which three are the Show Fell race
- Styhead to Scafell Pike (2)

Figure 45 – Example of Strava Route Details

[118] https://www.thelakedistrict.org/things-to-do/walks/wastwater-and-low-wood/ Accessed: 08/02/24

Water-based activities

Whilst there is no formal infrastructure to support the use of Wastwater, the LDNPA website identifies the swimming, canoeing, kayaking, paddleboarding and rowing boat use as permitted under local byelaws [119].

Among the more specialised water-based activities are: wildwater swimming and scuba diving.

Supporting infrastructure

With such a diverse and well publicised range of activities available in Wasdale, there is a need to consider whether there is an appropriate infrastructure. The current infrastructure includes: highways network, footpaths, open access land, car parks and camp sites.

Highways network

Wasdale is a dead-end valley, this means that traffic heading for the upper reaches of the valley can only exit by retracing it's steps. The current tarmac highway runs along the northern shore of the lake and in most places is single carriageway. The route is interspersed with cattle grids and several narrow stone road bridges.

Proceeding up the valley the road becomes wall lined on both sides. By the time one reaches Wasdale Head, the road narrows to just over seven feet, leading to substantial congestion for farm traffic and the local community going about their business.

At the top of the lake there is a right turn round to Wasdale Hall Farm on the eastern shore, which is a dead end.

Running further up the valley, on the northern shore, the road bifurcates, with the lefthand fork terminating just beyond the Wasdale Head Inn and the right hand at Burnthwaite Farm.

Footpath Network and Open Access land (informal recreation asset)

A comprehensive footpath network and large areas of Open Access fell support the formal and informal recreation opportunities in and around Wasdale. Footpaths are found criss-crossing all over the enclosed farmland of Nether Wasdale. Those delineated on the now open access fells, tend to traverse ridge lines and up alongside ghylls. Several paths are ancient track ways connecting Wasdale with other valleys to the north, east and south. Others are pack horse trails with examples of post-Medieval pack horse bridges along them. Some are drove roads used previously to move stock to market or in places corpse tracks, such as the Burnmoor Road leading to St Catherines in neighbouring Eskdale.

[119] https://www.lakedistrict.gov.uk/visiting/things-to-do/water/access-to-the-lakes Accessed: 06/02/24

The Open Access land as designated under the Countryside & Rights Of Way (2000) Act covers almost the entire of Wasdale, at times coming down to the lake road. Only the inbye around Wasdale Head and the enclosed land southwest from Roan Wood towards the A595 is not included[120].

Car parks (formal recreation asset)

There are three official car parks in Wasdale all in the ownership of the National Trust:

- Lake Head - £5 for up to 2 hours, £7 for up to 4 hours, and £9 all day. No overnight parking
- Nether Wasdale – honesty box by donation
- Overbeck – honesty box by donation

Given the draw of Wasdale Head for various recreational activities as outlined above, Lake Head is a popular destination at any time of year. In the summer months it quickly fills up leading to overspill onto adjacent areas of common land and the verges. With the narrow wall-lined roads in this part of the valley this causes significant congestion for local traffic.

Camp sites (formal recreation asset)

The main camp site in Wasdale is at Wasdale Head and run by the National Trust[121]. It includes eight heated camping pods, 3 tipis, a bell tent and 11 campervan pitches with hard standings and limited electric hook ups. Overall pitch capacity is 120.

Facilities at the campsite include an on-site shop, a toilet and shower block, washing-up areas and a laundry room.

Recreation Organisations

During primary data collection, numerous clubs and a small business operating within the recreational sector were identified by both participants and the researcher. These entities can be broadly categorised into two groups: membership clubs and associations, and private businesses:

- *Membership Clubs* - In the Wasdale area, two active clubs were identified: the Fell and Rock-Climbing Club and the Achille Ratti Climbing Club, both of which maintain properties in the valley for their members to access the fell landscape for walking and climbing activities. Additionally, there is a growing interest in wild swimming in Wastwater, leading to the establishment of the Wild Wasdale Swimming Club.

[120] Data derived from: https://magic.defra.gov.uk/MagicMap.aspx Accessed: 08/02/24
[121] https://www.nationaltrust.org.uk/holidays/lake-district/wasdale-campsite Accessed: 08/02/24

Although specific membership figures for this organisation are not available, researchers noted anecdotal evidence of swimmers in Wast Water during all data collection visits. Furthermore, the Cumberland Fell Runners Association (CFRA) was found to be active in the Wasdale valley region, organising various events throughout the year.

The engagement of local farming communities with the climbing clubs was limited, but they demonstrated connection with the other two clubs in various ways. Some members of the Wasdale farming community were actively involved in the wild swimming group. Additionally, several local farmers supported the activities of the CFRA by granting access to their land or coordinating with the club for runs across Nether Wasdale Common.

- *Private businesses* - Several private recreational businesses were observed operating in the Wasdale Valley, primarily by hosting or guiding outdoor activities. *Carolclimb Outdoor Adventures*, based in the valley, offers a range of guided outdoor activities including mountaineering, climbing, and canoeing. Many of these activities take place within the Wasdale valley and receive considerable support from local farmers seeking to bolster local businesses. Additionally, several large outdoor adventure companies operate activities within Wasdale, with *Cumbria Ventures, Lakeland Mountain Guides*, and *West Lakes Adventures* being the most identified. Local farmers were noted to support these businesses, particularly those offering accommodations, as they often directed their clients to these outdoor adventure companies' services.

Recreation summary

The findings highlight the diverse range of recreational opportunities available in Wasdale, facilitated by both clubs and private businesses. Despite varying levels of engagement from local farming communities, there is evident support for these activities, indicating the significance of outdoor recreation within the community and local economy.

9. Intangible Cultural Capital

Intangible cultural capitals (ICC) are identified as ideas, practices, beliefs, traditions and values associated with a specific culture. During research activities a wide variety of ICC were identified namely, Rightness of system for place, Connection to/custodianship of the land, Individual/self-reliance, supporting others, hard work, intergenerational cultural knowledge transfer and centrality of livestock.

Rightness of system for place

There was a strong sense of belief amongst all participants that the hill farming system of livestock production they operate is correct and appropriate to place. This seems to connect to their continuation of a traditional farming system, and a connection to their ancestral predecessors.

This connection to ancestors and traditional rightness of system is particularly strong amongst Wasdale farmers, who view their practices as a continuation of an ancient system:

> "*The field walls round here, they've been like that since the Vikings, and we are still using them in the same way today*." (Wasdale Farmer 1)

Connection to/custodianship of the land

A theme raised by many of the participants both in interview and during ethnographic activities was the connection to the hill landscape and how they believed themselves to be custodians of that land.

Through the research process the interconnection of the land, the lifestyle and the farming system came up time and again. Farmers often seeing themselves are totally interlinked with the land and its historical management. The final word on this core cultural belief should be left to one of the participants;

> "*This land looks the way to does cos of us and people like us working the land for generations."* (Wasdale Farmer 9)

Independence

The traditional practice of Wasdale farmers is to be very independent and self-reliant on their own farms, they don't ask or expect others to help or interfere with their own private farmstead or business. When asked was about who you go to for advice, the common response was no one. They did get advice but would never be seen to ask directly. It was usually done by asking questions about livestock;

> *"You'll talk to your neighbours about their stock, what they're doing this year. See if you can get some ideas."* (Wasdale Farmer 4)

This self-reliance and toughness are critical to farmers sense of self, however this is tempered by the need to work with others. This manifests as a tradition of support within the community.

Supporting others

Supporting other community members were common amongst participants and appeared to be born from a shared understanding of how hard it is to making a living as a hill farmer. The hardness of their vocational way of life will be explored in more detail in the next section, which looks at the traditional practice of hard work within hill farming culture. The reason behind the willingness to help and support one another was taken up by NW Farmer 4:

> "*If someone rings up and needs a hand you'll always help if you can. Sometimes we all need a bit of extra help. Particularly now as flexible labour is so hard to find, there isn't the young guys around like there used to be*."

Hard work

When visiting Wasdale accessing farmers was most commonly hampered by their business and commitment to constant work. The only way to contact hill farmers was to get them on their mobile phones whilst working which could be from anytime from 5am to 10 pm, or by physically finding them in the fields at work.

This drive for work seems to be deeply engrained in all hill farmers and something which is an assumed cultural belief. If hill farmers are not seen to be working hard, it will reflect negatively on them amongst their peers. Wasdale Farmer 5 makes a telling comment about hill farmers and work:

> "*We're always busy. It's just the fell farmer way, it's the way you're taught. There is always a job to do on a fell farm. If it's not working with the sheep, then it's putting up walls, clearing drains, fixing fences, always busy.*"

Hard work was identified as a central practice within hill farming, with both positive and negative implications for individuals. A number of participants identified this cultural belief and practice as being instilled in farmers by their elders. This connects directly to the following section which explores the cultural practice of intergenerational knowledge transfer.

Intergenerational learning

Eighty percent of farmers interviewed in Wasdale had developed their skills and knowledge on farm, very often from parents and grandparents. Due to the culturally immersive and

experiential nature of the learning experience many participants found it hard to recognise the skills and knowledge they had accumulated. Wasdale Farmer 10 was able to gauge it to some extent:

> "*You just do it, know what to do instinctively, especially with livestock*."

Skills around the handling of livestock where central to the community, however, they display and array of country skills, including, drystone walling, hedge laying, dog training. Most of farmers had learnt these skills through watching or helping parent undertake these tasks. However, the issue of a lack of young people to transfer knowledge to and farm succession was identified as an issue in the Wasdale valley. At least half of the farms lacked a younger generation to pass the farm and knowledge onto.

Centrality of Livestock

Underpinning this centrality of livestock within the socio-cultural life of the hill farming community are some deep-rooted beliefs and traditions. One belief expressed by many participants is the near sacred place of livestock, particularly hill breeds of sheep to farmers. This is most clearly communicated in a quote by Wasdale Farmer 3:

> "*These Herdwicks, they are sacred within our farming system. We'll always have them on these fells."*

To support this over 90% of participants are members of the Herdwick Sheep Breeders Association and identified the breeding of these sheep as a core element of their life.

The sacred nature of these flocks within the farmer's work lives has led to a strong emotional attachment outline by two participants. Wasdale Farmer 7 outlines the near familial sense of connection and place livestock take up:

> *"We spent so much time with our livestock, in the end they're like family.*"

Intangible Cultural Capital Conclusion

In conclusion, the data suggests that hill farming communities have a keen sense of identity, built around their vocation of livestock production and deep connection to the fell landscape. They have a tradition of collaborative and humble working, tempered by individuality and self-reliance, which is supported by a powerful sense of community and intergenerational knowledge transfer. Hill farmers value hard work, which is both a positive and negative aspect of their culture and is often passed down from elders to younger generations. Livestock management is central to their cultural practices, with livestock holding a near sacred place within their life ways, generating strong beliefs and traditions around them. Overall, the hill farming culture is a complex and interconnected system of practices, beliefs, and values, which serves to sustain their way of life and connection to the fell landscape. These ICCs appear to be consistent with research undertaken with the wider

hill farming community[122], providing some evidence to support the notion of a relatively homogenous set if cultural values underpinning the wider hill farming community.

[122] (Gray, 1999; Morgan, 2024)

10. Social Capital

In the context of this study social capital (SC) is defined as "features of social organisation, such as trust, norms and networks that can improve the efficiency of society by facilitated co-ordinated actions"[123]. This led to data collection of SC to be under the umbrella of four main themes, namely Relationships of Trust, Reciprocity and exchange, Common rules and Norms and finally, Network & Groups. Due to the interactional nature of SC there are implicit overlaps in the data but for the process of clarity they are explored below within these broad headings.

Relationships of Trust

Throughout the study, trust has been highlighted as central to hill farming communities. Either when working on collaborative land management activities like gathers or selling livestock, trust is cited as vital.

Wasdale Farmer 6 provides a succinct review:

> "*Sheep farming, in these small valleys is all about trust*."

This comment was made in relation to the returning of lost stock and management of boundaries, but it holds for many other activities. Wasdale farmer 4 explained how this trust was important to communal grazing, especially when collecting livestock:

> *'One gathering days we all end up with one anothers sheep, but we all trust each other to bring 'em back. I'll often take some to my neighbour and he'll give me some to take back to the lads up the valley. It all works on trust*"

Relationships of trust are also central to collaborative working or sharing of resources. When working together Wasdale farmers do not worry about contracts or legal guarantees, business is done on a handshake:

> *"There's nothing written down. It's just very much good working relationships."*
>
> *(*Wasdale Farmer 4)

Trust in this scenario hinges on honouring commitments and demonstrating reliability in fulfilling agreements. Conversely, many farmers harbour distrust towards outsiders due to limited interactions regarding livestock or land transactions, impeding traditional trust-building mechanisms. Consequently, establishing and sustaining trust is deemed challenging. This challenge is notably pronounced in interactions with external entities like Natural England, where farmers exhibit scepticism towards agency personnel, perceiving them as opaque in dealings and lacking opportunities to cultivate trusting rapport through close collaboration.

[123] Putnam et al (1993)

Reciprocity and exchange

As discussed at the end of previous section reciprocity and trust are common bed fellows, this is a concept hill farmers are well aware of:

> "*When we're bringing in hay or shearing, things like that, our neighbours will drop in and give us a hand. There's no charge or owt but we will do same for 'em*"
>
> (Wasdale Farmer 1)

This observation underscores the significance of trust and reciprocity within hill farming communities, where much of the exchange revolves around labour—a resource that, although seemingly free, holds immense value for participating farmers. The mutual exchange of labour is a prevalent practice among community members, with numerous Wasdale farmers aiding their neighbours in tasks like gathering and shearing. Typically, this assistance is shouldered by younger, more physically capable farmers, albeit at the expense of their time and the opportunity to attend to their own farms. Nonetheless, collaborating with seasoned farmers affords them valuable learning experiences.

These reciprocal acts, though informal, are governed by intra-community rules and norms of behaviour, several of which are outlined in the subsequent section.

Common rules and Norms

These social conventions primarily pertain to the practical aspects of daily life, particularly cooperative land management, behavioural norms, and the trade of livestock. The majority of Wasdale farmers participate in some form of collaborative land management, whether through commons or shared access to private fells. These communal resources are typically overseen by formal groups such as the Nether Wasdale Commoners Association, which establish their own regulations and enforcement mechanisms.

In addition to these formal regulations, there exist informal rules and norms upheld within the communities, particularly notable in the freehold fell areas around Wasdale Head. Here, farmers engage in informal cooperation to oversee the open freehold fells and hefts that adjoin each other. Wasdale Farmer 4 provides insight into the workings of this system:

> "*We don't necessarily gather the fells together, but we try and support each other, especially with the traditional hefts breaking down. Sometimes I'll need to get my sheep off other people's fell, but we have an understanding and it work out*."

During conversations with Wasdale farmers, several informal rules or norms were emphasized. For instance, when sheep belonging to other farmers were encountered, they were either guided back towards their home farms or gathered together with the rest. Those

collected were then penned separately to facilitate their return to their rightful owners. This unspoken courtesy was consistently observed by the farmers.

Similar practices were noted among farmers working on private fells, where although the areas might be fenced, common expectations regarding behaviour around livestock;

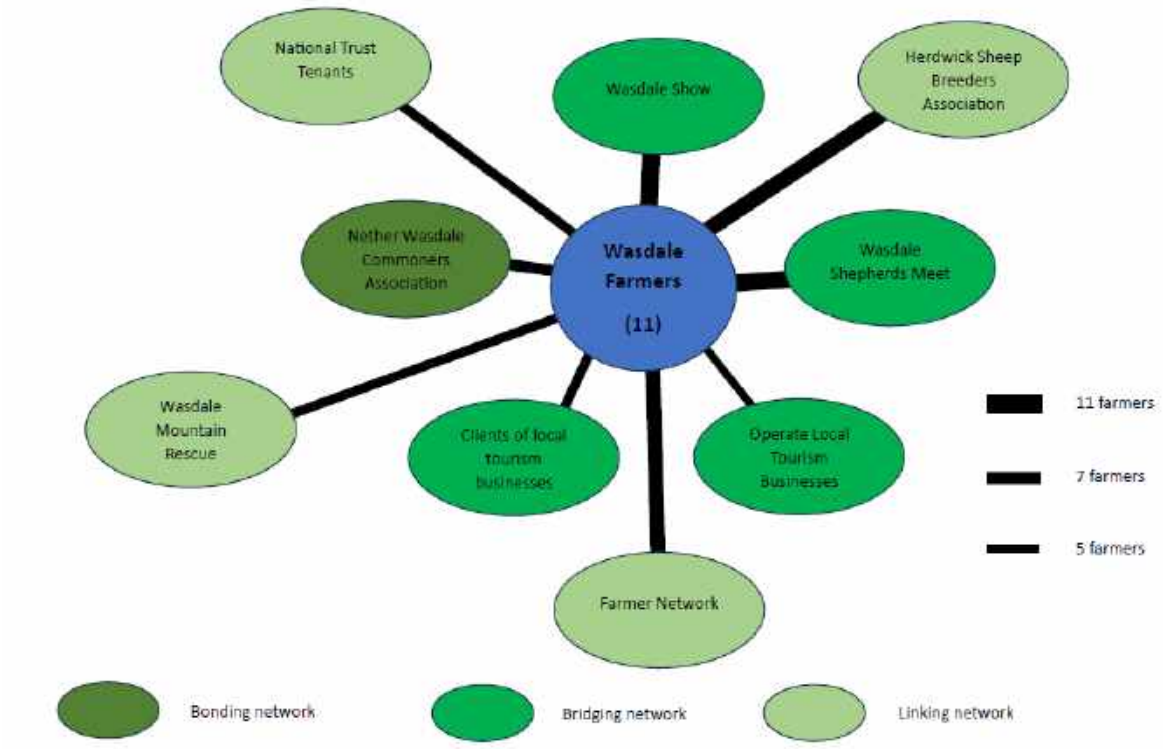
> "*We lose a few sheep every year, a fence might come down or whatever. But our neighbours will find them with theirs and bring them back. We do the same for them, it's just what you do.*" (Wasdale Farmer 10)

The enforcement mechanisms surrounding these informal rules remained somewhat ambiguous. However, anecdotal accounts from participants suggested that violations, such as failing to return others' livestock, elicited strong reactions within the community. Even the mere suspicion of such misconduct could result in the ostracization of the implicated member.

Moreover, failure to adhere to the established rules and norms on commons typically resulted in a reduction in collaborative assistance for the farmer or partial isolation from the broader community.

To explore these specific social capitals within the Wasdale farming community, the study undertook a network analysis shown in Figure 46. Several key groups and networks were identified and are explored in detail below.

Figure 46 – Social Capital: Wasdale Farmer Groups and Networks



Nether Wasdale Common Association (NWCA)

Seven of 11 farmers interviewed were member of the NWCA. This group was seen to play a pivotal role in overseeing, governing, and safeguarding the resources of common land. The key responsibilities encompass establishing guidelines for common land usage, distributing grazing rights and other privileges among members, overseeing conservation initiatives, and resolving disputes concerning the common land.

The association utilised a democratic framework, allowing members to collectively participate in decision-making processes regarding common land management through meetings or by electing representatives. Additionally, they often collaborate closely with relevant authorities or governmental bodies to ensure adherence to legal obligations and to secure resources or assistance for the maintenance and enhancement of common land.

In essence, commoning associations serve as crucial stewards of common land, ensuring its sustainable utilisation and fair allocation among members, while also safeguarding its ecological and cultural significance for future generations.

National Trust

The National Trust (NT) holds significant land ownership in the valley, serving as a key connecting entity. Among the farmers interviewed, six out of eleven are tenants of the NT, while the remaining five either hold grazing rights on NT commons or border NT property. This widespread integration of the valley's farming system and the Trust's role as a landlord positions it as a crucial player in Wasdale's social fabric. This importance is likely to persist over the next decade, especially as several tenancies are expected to become vacant. Four of the tenant farmers are aged over 50 and are likely to relinquish their tenancies in the coming years. Consequently, the Trust will play a vital role in preserving the valley's social structure through its selection of new tenants. Experience from other areas of the Lake District highlights the detrimental impact of inadequately considered new tenants on established farming communities.

Wasdale Mountain Rescue

The vast majority of farmers in the area actively engage with the Wasdale Mountain Rescue Service (WMR) in various capacities, whether as supporters or beneficiaries. Six farmers, for instance, contribute to the WMS by granting access through their land or facilitating training activities on their hills or grazing areas. This includes providing space for helicopter landings and specialized dog training sessions. Conversely, several farmers rely on the services of the WMR, particularly in situations requiring the rescue of livestock from perilous locations on the high fells or steep slopes bordering water bodies, which provide training events for the rescue team. The WMR also present a display at the Wasdale head Show which helps raise funds for the service.

This reciprocal relationship fosters a self-supporting communal cooperation, enabling the WMR to continue its invaluable service for the safe functioning of the valley as a destination for outdoor activities and tourism.

Wasdale Show and Shepherds meet

This event is deeply intertwined with the network of farmers within the valley, with all participants serving as organizers, contributors, or visitors. The show offers a wide range of benefits to the local community and serves as a showcase for the farming community. For farmers in the valley, it plays several critical socio-cultural roles. First, it serves as a welcomed social event where community members can gather informally, reconnect, and strengthen social ties. Secondly, it provides a vital opportunity to engage in central cultural activities, particularly the showcasing of Herdwick sheep. Small local shows like the one in Wasdale offer local farmers the chance to exhibit their Herdwick sheep alongside key players in the regional breeding system. Together, these aspects make the Wasdale show a significant celebration of the local hill farming community and its distinctive farming practices.

Farmer views

Support for the local Wasdale Show and Shepherd's Meet was robust among the group, with all participants contributing in various capacities, whether through organisation, showcasing livestock, or simply attending social gatherings. However, a concerning trend was noted in the responses, with the majority of farmers becoming less involved in shows and the broader exhibition of livestock. As previously highlighted, showcasing livestock plays a vital socio-cultural role in hill farming, fostering bonding and bridging social capital.

Many of the older farmers interviewed had previously been active in sheep showing and regularly participated in shepherd's meets across the region. However, they were scaling back their involvement due to time and energy constraints resulting from the economic pressures of managing their farm businesses. Often, they would only exhibit sheep at the Wasdale show to support the local event. The two younger farmers interviewed (under 35) were not currently involved in sheep showing, although they had done so in their youth. Similar to the older farmers, the younger ones cited working long hours or taking on contracting work to sustain their farm businesses as reasons for their reduced engagement.

Regardless of the reasons, this shift away from the traditional practice of livestock showing carries significant implications for the community. It diminishes opportunities for expanding and strengthening social networks and jeopardises the continuity of this longstanding socio-cultural tradition. Both outcomes have the potential to weaken the community and the cultural fabric of the landscape they inhabit.

HSBA and The Farmer Network

The Wasdale farmer network was found to extend its connections into the broader farming community through engagement with two organizations. Firstly, almost all of the farmers interviewed, with the exception of one, were members of the Herdwick Sheep Breeders Association (HSBA), an organization they deemed crucial to their role as Herdwick sheep farmers. This association serves as a vital link connecting Wasdale to the wider Lake District farming community and beyond, facilitating networking opportunities, sales, and events.

Second, 75% of the farmers in the study were also members of The Farmer Network, a farmer-led organization operating across Cumbria and North Yorkshire. This network was perceived as providing valuable information, training opportunities and support to the Wasdale community, while also connecting them to broader trends and developments in Northwest agriculture.

Both of these organizations, along with the West Lakeland CIC, significantly extend the social networks of farmers within the Wasdale valley. They provide access to information and expertise from the wider Northwest region, helping to bridge the potential spatial isolation of the Wasdale valley and ensuring farmers stay connected to developments in agriculture.

Local businesses

Five of the local network of farmers were involved in tourism diversification businesses, which they perceived as working in collaboration with other small local businesses. These farmers actively encouraged their clients to patronize local food and recreation establishments and viewed themselves as integral parts of a local ecosystem of small businesses.

The remaining six farmers within the network were observed to support the majority of these local businesses, primarily by being patrons themselves, especially during off-peak tourism seasons. Several pubs and cafes also served as formal and informal venues for farming-related gatherings, such as grazier and CIC meetings.

There were various outdoor activity businesses operating within the valley, and their role in the local business ecosystem appeared to be mixed. While some farmers indirectly interacted with and supported these businesses, others perceived them as providing limited benefit to themselves or the valley as a whole. These businesses were seen to utilize the landscape as a resource without directly benefiting the farmers who serve as custodians of these resources.

Social capitals Conclusion

The social network case study of Wasdale farming community, illustrates the intricate network of social connections and collaborations within the community. Various entities, such as the National Trust, Wasdale Mountain Rescue, the Wasdale Head Show and

Shepherds Meet, and the HSBA and Farmer Network, play pivotal roles in fostering communal cooperation and maintaining the social fabric of the valley.

The National Trust's significant presence as a landlord shapes the valley's farming structure, with implications for future tenant arrangements. Similarly, the collaboration with Wasdale Mountain Rescue showcases a self-supporting communal effort crucial for the valley's safety and functionality.

Events like the Wasdale Head Show and Shepherds Meet serve as vital socio-cultural gatherings, facilitating social bonds and showcasing the unique farming practices of the community. Furthermore, engagement with organizations like the HSBA and the Farmer Network expands the social networks of Wasdale farmers, providing access to resources and expertise beyond the local context.

Local businesses also play a crucial role, with farmers supporting tourism diversification ventures and vice versa. However, some outdoor activity businesses are perceived to have limited benefit to the valley, highlighting the complexities of local economic dynamics.

Overall, the case study underscores the interconnectedness of various actors and organizations in Nether Wasdale, emphasizing the importance of collaborative efforts in sustaining the valley's social and economic vitality.

11.The Interrelationship Between Cultural and Social Capital in Wasdale

The data collected for this report underscores the robust cultural identity prevalent within the Wasdale farming communities, deeply rooted in their profound connection to the land and the unique environment in which they operate. This echoes previous research, such as Bailey et al. (2006), which has highlighted the symbiotic relationship between farmers and their landscapes, as well as their distinct way of life. Participants in this study notably emphasized the importance of cultural belonging in shaping their attachment to their surroundings and their way of life, with many identifying more as a cultural group than simply a farming community. Similar themes regarding the close ties between community and landscape have been observed in studies of hill farming communities in Scotland[124].

The hill farmers in the study exhibited strong social bonds stemming from their shared socio-cultural identity, providing them with a sense of belonging even in the face of geographic isolation. This finding diverges slightly from existing literature on farming and social isolation, which often suggests increasing levels of isolation[125].

Another benefit arising directly from cultural belonging was the establishment of a structured cultural community, providing individuals with a familiar framework of rules, beliefs, and values to guide social interactions. Consequently, farmers were able to navigate social interactions within this socio-cultural community by adhering to culturally acceptable practices, such as reciprocal labour exchange and communal livestock management. This aligns with concept of community construction and the mechanisms for navigating social interactions[126].

The findings of this report also align with the understanding that social capital is pivotal for community functioning, with all facets of social capital being crucial for the operation of the Wasdale farming system. Trust, in particular, emerged as a vital component within hill farming communities, integral to various practices such as collaborative land management, livestock transactions, and resource sharing. Reciprocity and exchange within these communities are deeply rooted in trust and a fair exchange of resources, with labour being a prevalent form of exchange. These exchanges adhere to cultural norms and unwritten rules that are generally understood and accepted within the community.

The findings underscore the foundational role of intangible cultural assets, such as values, traditions, and beliefs, in shaping the shared identity of hill farmers and fostering community cohesion. Social capital, characterized by trust, cooperation, and relational dynamics, facilitates the transmission and sharing of these cultural values. Trust, fostered through equitable practices and adherence to shared values, emerges as a pivotal element in nurturing strong bonds and social cohesion within the community.

This strong community connection offers numerous benefits, including collaborative action, resource sharing, cultural belonging, and elevated cultural status. The shared socio-cultural identity enables effective communication, coordination, and resource utilization within the group, contributing to the resilience of the farming system. Access to other forms of capital, such as human (skills and knowledge) and natural capital, is influenced by the interactive relationship between cultural and

[124] Gray (1996, 1999)
[125] Lobley et al. (2002).
[126] Coleman (1988)

social capitals. The shared socio-cultural identity acts as a key component that unlocks communal resources, with trust playing a crucial role in accessing and sharing resources within the community.

Moreover, the study highlights the cultural significance of livestock, especially the unique and locally adapted Herdwick sheep, beyond their practical utility, representing tangible cultural assets and contributing to individuals' socio-cultural standing within the community. Farmers prioritize their cultural aspirations over financial gains, leveraging their cultural knowledge to enhance their financial capital while aligning with the community's cultural values.

In conclusion, the interplay between social and cultural capitals forms the basis for community development and economic sustainability in hill farming communities. The socio-cultural identity of hill farmers shapes the cultural dimension of other capitals, and cultural considerations strongly influence farmers' decisions and behaviours. By recognizing and valuing the importance of socio-cultural identity, communities can nurture cohesion, efficiently utilize resources, and sustain their agricultural practices amidst evolving challenges.

12.How Cultural and Social Capital Relate to Natural Capital in Wasdale

The benefits of this collaborative process are evident, as it enables farmers to access the natural capital assets of extensive areas of semi-natural vegetation that would otherwise be impossible to exploit, for example, in the communal system of hefts and gathers operated on common land. It also facilitates the movement of large numbers of livestock within the sheep stratification system. These themes have been addressed in numerous previous studies. Various literature[127] on the subject suggests that collaborative work is central to hill farming and the overall resilience of the system, thereby emphasising the importance of social and cultural capitals within the broader context.

Through the combination of social, and cultural capitals, the community is able to utilise other resources effectively, particularly the natural capitals present in the landscape and vegetation, thus creating a resilient farming system. This concept extends beyond UK hill farming communities, as the combination of social, cultural, and natural capitals has been recognised as vital for the resilience of farming communities worldwide[128].

Conversely, hill farming systems which as socio-ecological systems (SES) provide Low input-low output agricultural systems support High Nature Value landscapes[129], notably habitats such as:

- Fell tops - upland mosaic of dwarf shrub heath, bog and acid grassland
- Valley sides– rush pastures
- Valley bottom – hedgerows and hay meadows
- Drystone walls - ecological niches
- Farm buildings - surfaces for many lower plants to flourish and, internally, roosts for bats and birds.

This has recently formally re-acknowledged in the Joint Statement between the Department of Culture, Media & Sport (DCMS), the Department of Environment, Food & Rural Affairs (DEFRA) and Natural England[130] and in passing as part of the new Protected Landscapes Targets and Outcomes Framework[131].

In summary, lack of effective support for cultural and social capital in hill farming has detrimental effect on our ability as a society to maintain and improve natural capital in this system.

[127] Mansfield (2006, 2011, 2019),
[128] (Muhar et al., 2018, Reid et al., 2014)
[129] Bignall & McCracken (2000)
[130] JOINT STATEMENT (2024)
[131] Protected Areas Targets and Outcomes Framework

13. Conclusions & Recommendations

13.1 Conclusions

Our synthesis reveals that Wasdale hill farming produces a wide range of cultural and social capital which not only underpins the natural capital, but provides a rich cultural heritage of its own, supporting a diversity of recreational activities. Particularly important features include:

- ***Cultural heritage*** - The Wasdale farming community are guardians and stewards of a unique socioecological system and its related cultural landscape formed over the last three thousand years and duly recognised through WHS inscription. Intrinsic historic cultural features such buildings, walls and common land remain fundamental to the perpetuation of this rich cultural landscape.

- ***Changes in economic and environmental policy*** negatively affecting hill faming in Wasdale (and in other upland areas) place the cultural heritage and its entwined cultural capital and social capital directly under threat. For Wasdale a tipping point could well be reached in the next twenty years, possibly sooner due to retirement of elder farmers.

- ***Tangible Cultural Capital*** – the Wasdale farming system produces a diverse package which includes: drystone walls, hedges and hedgebanks (kests), hefts, shepherds meets, the Wasdale Head Show, Shepherds Guide entries and related recreational opportunities.

- ***Intangible Cultural Capital*** - The exploration of Intangible Cultural Capitals (ICC) within Wasdale community reveals a deeply ingrained sense of identity and connection to the land, anchored by traditional practices and values. The ICCs identified, including the perceived rightness of the farming system for the landscape, custodianship of the land, self-reliance, community support, dedication to hard work, intergenerational knowledge transfer, and the centrality of livestock, collectively illustrate the resilience and cohesion within these communities. Wasdale farmers exhibit a tradition of collaborative work, balanced with individuality and a strong sense of community, while their profound attachment to livestock underscores the cultural significance embedded in their way of life. Overall, the hill farming culture emerges as a complex and interconnected system of beliefs, practices, and values, sustaining their livelihoods and connection to the fell landscape.

- ***Social Capital*** - The study illuminates the pivotal role of social capital in the cohesion and resilience of the Wasdale farming community. Trust, reciprocity, and adherence to shared norms form the bedrock of social interactions, facilitating cooperation and mutual support among community members. Key organizations and events, such as the Nether Wasdale Common Association and the Wasdale Head Show, serve as

crucial platforms for community engagement and collaboration. However, challenges exist, particularly concerning the impact of certain external factors on the valley's resources and economy. By leveraging and strengthening existing social networks, stakeholders can address these challenges and foster a more sustainable and vibrant community in Wasdale.

- ***Recreation and Infrastructure*** – recreational opportunities created by the farmed landscape include walking, cycling and fell running. Outdoor clubs and small businesses have developed benefitting from the farmed cultural landscape. Associated water-based activities derived from visitors seeking low-impact landscape experiences include: wild swimming, canoeing, kayaking, paddleboarding, rowing boats. Challenges created by increasingly excessive visitor numbers include congestion and interruption to practical farm management.

Unfortunately, a range of contemporary drivers are creating additional tensions which have begun to distort the socioecological system of Wasdale's farmed cultural landscape, most notably a perception that raising productivity will be of benefit to farm businesses. In doing so, ill-conceived economics are distorting the farming system and impacting negatively on the cultural heritage of Wasdale, as well as threatening farm viability. At the same time, inappropriate agri-environmental policies are undermining the functionality of the farming system through a lack of understanding of how this socioecological system works. This in turn threatens natural capital resilience and the landscape visitors come to enjoy. Concurrent increased visitor pressure is impacting on the very experience people are seeking, as well impacting negatively on the pragmatics of daily farm management.

From our observations, analysis and synthesis of the social and cultural capital generated by the Wasdale farming community and the drivers and trends evolving we suggest TEN recommendations.

13.2 Recommendations:

R1 – Develop better support structures for the continuation of hill farming: using well-evidenced local contemporary and retrospective data to integrate natural, social and cultural capital goals to enable dual targets of outcome-led environmental objectives and farm business viability.

R2 - Complete a full valley cultural heritage survey: employing the methodology used by the National Trust Historic Landscape Surveys, conduct archaeological and historic surveys on the private farms which formed this research. This would give a fuller picture of the cultural heritage of Wasdale.

R3 - Preserve Socio-Cultural Traditions: Implement measures to support and promote socio-cultural traditions such as sheep showing and shepherd's meets, which play a vital role in fostering community cohesion and preserving cultural heritage. This could include a corporate Whole Valley sponsorship seeking green and cultural credentials. Other options

include logistical support for local events and initiatives aimed at engaging farmers, particularly younger generations, in these traditions. Potentially looking for additional funding sources to pay increased prize money for livestock showing, making the activity more economically attractive for farmers, covering the cost of time spent away from farm.

R4 - Support for Inter-generational Knowledge Transfer: Implement programs to facilitate the transfer of traditional knowledge and skills from older generations to younger ones within hill farming communities. This could include mentorship programs, apprenticeships, and educational initiatives focused on agricultural practices and rural skills. Work directly with the NT, the new LANSS (Land & Nature Skills Service) and Cumbria Chamber of Commerce and engage the older farmers nearing retirement without on farm successors in Wasdale allowing knowledge transfer to younger farmers before it is lost.

R5 - Produce a 'multiple capitals account' for Wasdale: calculate a financial account for all capitals produced by farming in Wasdale to include: natural, human, social, cultural and financial. This would enable a better grasp of the Total Economic Value produced by the Wasdale farming community to present to potential corporate sponsors and as evidence for government bodies of the importance of this socioecological system.

R6 - Promote Radical Sustainable Tourism: Work with local authorities and tourism organisations to promote sustainable tourism practices that minimise negative impacts on farm operations and the surrounding environment. This could involve the production of a specific plan for Wasdale and include initiatives such as visitor education programs, responsible camping guidelines, and infrastructure improvements to alleviate congestion in heavily visited areas. In Wasdale specifically, this should involve a shuttle bus from Nether Wasdale to Wasdale Head, reducing vehicles especially at peak times to include 'early bird' and 'night owl' services.

R7 - Promoting Sustainable Economic Development: Support sustainable economic development initiatives that benefit both hill farming communities and local businesses. Encourage diversification or 'added value' strategies that complement traditional farming practices and contribute to the long-term resilience and prosperity of the local economy (see R4 and R5).

R8 - Engaging with External Organisations: Encourage engagement and collaboration with external organisations, such as the National Trust and local businesses, to lever resources and expertise for the benefit of hill farming communities. Facilitate dialogue and partnership-building efforts to address shared concerns and explore opportunities for mutual support and collaboration. Form a joint tourism/recreation/ farming Wasdale partnership.

R9 - Adaptive Management Plans: Develop adaptive management plans in collaboration with key stakeholders, namely Natural England, National Trust and LNDPA to address the specific challenges faced by traditional hefts in different parts of the valley. These plans should incorporate flexibility to accommodate local variations and changing environmental conditions while aiming to maintain the integrity of traditional farming practices. By fostering a better understanding of these issues, stakeholders can make more informed decisions that support the sustainability of upland ecosystems and communities.

R10 - Research and Documentation: Support further research and documentation efforts to better understand and appreciate the complexities of hill farming culture. This could include funding for ethnographic studies, academic research projects, and community-based research initiatives aimed at uncovering additional layers of intangible cultural heritage. Encourage programs and initiatives aimed at preserving and promoting the intangible cultural capitals (ICC) identified in hill farming communities. This could involve documenting traditional practices, beliefs, and values through oral histories, written records, and multimedia platforms.

Lois Mansfield & Owen Morgan, 12th February 2024

References

Aitchison J., Crowther K., Ashby M., Redgrave L. (2000) '*The Common lands of England: a biological survey'*. University of Aberystwyth: Aberystwyth.

Armstrong, AM, Mawr, A, Stenton, FM and Dickens, B, 1950 *The Place-names of Cumberland*, Eng Place-name Soc, 20-22, Cambridge

Bailey, A. P., Garforth, C. J., Angell, B., Scott, T., Beedell, J., Beechener, S., & Rana, R. B. (2006) 'Helping farmers adjust to policy reforms through demonstration farms: lessons from a project in England.' *Journal of Farm Management*, *12*(10), pp. 613-625.

Banford A (2018) 'Delivering successful rural developed through the EU Initiative LEADER: the Cumbrian Experience p470 to 490 in: Mansfield L. '*Managing Upland Resources: New Approaches for Rural Environments'* Whittles Publications: Dunbeath.

Berkes, F., J. Colding and C. Folke, editors. 2003. *Navigating Social-Ecological Systems: BuildingResilience for Complexity and Change*. Cambridge: Cambridge University Press.

Bignall*,* E. M. and *McCracken*, D. I. (2000) **'**The nature conservation value of European traditional farming systems.**'** *Environmental Reviews* Vol 8(3) p149 to 171

Bowles D, Carson A, Isaac P (2014) Genetic Distinctiveness of the Herdwick Sheep Breed and Two Other Locally Adapted Hill Breeds of the UK. PLoS ONE 9(1): e87823. doi:10.1371/journal.pone.0087823

Brown G (2009) '*Herdwicks: Herdwick Sheep and the English Lake District'* Hayloft: Kirkby Stephen.

Burton J (1994) '*Monastic and Religious Orders in Britain 1000-1300'* Cambridge University Press: Cambridge

Burton R., Mansfield L., Schwarz G, Brown K. & Convery I. (2004) '*Social Capital in Hill' Farming*' A report for the International Centre for the Uplands (DEFRA website).

Chiverrell RC (2006) 'Past and future perspectives upon landscape instability in Cumbria, northwest England' *Regional Environmental Change* 6, 101 to 114.

Claris, P and Quartermaine J. (1989) The Neolithic Quarries and Axe Factory Sites of Great Langdale and Scafell Pike: A New Field Survey. *Proceedings of the Prehistoric Society* Vol. 55

Coleman, J. S. (1988) 'Social capital in the creation of human capital.' *American Journal of Sociology*, *94*, S95-S120.

Costello E (2020) Hill farmers, habitats and time: the potential of historical ecology in upland management and conservation' *Landscape Research* 45(8) 951 to 965

Costello E (2021) 'The Colonisation of Uplands in Medieval Britain and Ireland: Climate, Agriculture and Environmental Adaptation' *Medieval Archaeology* 65:1, 151-179

Dark P (2004) '*The Environment of Britain in the First Millenium AD*' Gerald Duckworth & Co: London.

Davies OD. Morgan M. and Werret M (2009) '*Assessment of the Impact of Hefting (heafing or Learing)'* CTE0707 Reference Number BD1242.ADAS UK Ltd, Aberystwyth. https://sciencesearch.defra.gov.uk/ProjectDetails?ProjectID=15631 Accessed: 26/02/24

DLEC (2023) *Wyndham family, Earls of Egremont of Cockermouth Castle, Cockermouth*, Cumbria Archives Service Catalogue Entry. Accessed: 31/10/23. Full records held at Cockermouth Castle, last available 2018.

Evans, DJA; Brown, VH; Roberts, DH; Innes, JB; Bickerdike, HL; Vieli, A; Wilson, P (2015). Wasdale head. In: McDougall, D A; Evans, David J A. *The Quaternary of the Lake District: Field guide*. London: Quaternary Research Association, 213-238

Folke C. (2006) 'Resilience: the emergence of a perspective for social-ecological system analyses.' *Global Environmental Change*, Vol.16(3) pages 253 to 67.

Gates D (1879) '*New Shepherds Gide for Cumberland, Westmorland and Lancashire*.' Brash Bros: West Cumberland Times Office, Cockermouth

Gray, J. (1996) 'Cultivating Farm Life on the Borders: Scottish Hill Sheep Farms and the European Community', *Sociologia Ruralis*, 36(1), pp. 27–50. Available at: https://doi.org/10.1111/j.1467-9523.1996.tb00003.x

Gray, J. (1999) 'Open spaces and dwelling places: being at home on hill farms in the Scottish borders', *American ethnologist*, 26(2), pp. 440–460. Available at: https://doi.org/10.1525/ae. 1999.26.2.440.

Hernandez-Morcillo M et al (2013) 'Traditional Ecological Knowledge in Europe: Status Quo and Insights for the Environmental Policy Agenda' *Science and Policy for Sustainable Development*, 56:1, 3-17

Higham N (1986) '*The Northern Counties until AD1000*' Longworth: London

Holloway L (2004) 'Showing and telling farming: agricultural shows and re-imaging British agriculture' *Journal of Rural Studies* Vol 20 p319 to 330

Hoskins G (1980) '*The Making of the English Landscape'* Penguin: London

Jarvis RA et al (1984) *Soils and their use in Northern England* Harpenden : Soil Survey of England and Wales

Jayaraman A et al (2014) '*International Workshop on Sustainable Management of Socio-Ecological Production Landscapes in Noto'* United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS), and UNU-IAS Operating Unit Ishikawa/Kanazawa (OUIK) https://i.unu.edu/media/ias.unu.edu-en/news/2303/Full_Report_Kanazawa_International_WS.pdf

Joint Statement (2024) '*Integrating the Management of the Natural and Historic Environment*'. Joint Statement between Natural England, Historic England, and the National Lottery Heritage Fund. Accessed at: https://historicengland.org.uk/content/docs/advice/joint-statement-naturalengland-historicengland-nlhf/ On: 02/02/24

Lake District National Park Authority (2015a) *'Nomination Document of the English Lake District, Volume 1*.' LDNPA: Kendal

Lake District National Park Authority (2015b) 'Wasdale' Chapter 6 in: *Nomination Document of the English Lake District, Volume 2 Valley Descriptions and History*.' LDNPA: Kendal

Lamb RH (1937) '*Shepherds' Guide for Cumberland, Westmorland and Lancashire'* Herald Printing Company: Penrith

Lobley, M. Errington, A. McGeorge, A. Millard, N. and Potter, C. (2002) Implications of Changes in the Structure of Agricultural Businesses, Final Report to DEFRA, University of Plymouth.

Mansfield L (2011) '*Upland Agriculture and the Environment'* Badger Press: Bowness on Windermere

Mansfield L (2012) 'Hill farming identities and connections to place' in: Convery I, Corsane G & Davis P (eds) (2012) *'Making Sense of Place: Multidisciplinary Perspectives*' The Boydell Press: Woodbridge

Mansfield L (2018) '*Managing Upland Resources: New Approaches for Rural Environments'* Whittles Publications: Dunbeath.

Mansfield L (2019a) '*The efficacy of sisal for soil stabilisation on slopes: High Borrowdale, Cumbria'* A Research Report for Friends of the Lake District. CNPPA: University of Cumbria

Mansfield L (2019b) '*Valuing Cultural Capital: Place-based Rural Development for Upland Farming Opportunities from Japan'* Winston Churchill Memorial Trust, London

Mansfield L (in prep) '*Marginal Upland Agriculture: a Multiple Capitals Approach*.' Routledge: London

Merritt JW & Auton CA (2000) 'An outline of the lithostratigraphy and depositional history of Quaternary Deposits in the Sellafield District, West Cumbria' *Proceedings of the Yorkshire Geological Society* Vol 53(2)p129 to 154

Moore-Colyer (1998) 'Farming in Depression: Wales between the wars 1919 to 1939' Agricultural History Review vol 46(2):177 - 196.

Morgan, O. (2023) '*Gathering the broken heft: the effects of climate change mitigation schemes on the traditional management systems of the Lake District World Heritage Site*.' In: Royal Geographic Society Annual Conference: Climate Changed Geographies, 29 August - 1 September 2023, London, UK.

Morgan O (2024) '*Belonging and Connecting: the value of social and cultural capitals within the hill farming community*.' Unpublished PhD thesis. University of Cumbria

Mounsey W & Kirkpatrick W (1829) '*The Shepherds Guide- a delineation of the Wool and Earmarks on the different stocks and sheep of Patterdale, Grassmere, Hawkshead, Langdale, Loughrigg, Wythburn, Legberthwaite, St Johns, Wanthwaite and Burn, Borrowdale, Newlands, Threlkeld, Mattedale, Watermillock, Eskdale and Wastdalehead*.' W. Stephen: Penrith

Muhar, A., Raymond, C.M., van den Born, R.J., Bauer, N., Böck, K., Braito, M., Buijs, A., Flint, C., de Groot, W.T., Ives, C.D. and Mitrofanenko, T. (2018) 'A model integrating social-cultural concepts of nature into frameworks of interaction between social and natural systems.' *Journal of Environmental Planning and Management*, *61*(5-6), pp.756-777.

National Farmers' Union Westmorland (South) (1967) '*The Shepherds Guide'* Introduction by Malcolm Short Group Secretary NFU. Ramsden Williams Publications Ltd: Consett, Durham

National Trust (2000) '*Wasdale Head Historic Landscape Survey'* National Trust: Grasmere, Cumbria.

Neville Havins (1976) '*The Forests of England*.' Robert Hale & Co: London

Olsson P., Folke C., and Berkes F. (2004) Adaptive co-management for building resilience in social ecologicalsystems. *Environmental Management* 34: 75-90.

Ostermann OP (1998) 'The need for management of nature conservation sites designated under Natura 2000' *Journal of Applied Ecology* Vol 35: 968 to 973

Overton M. (1996) '*The Agricultural Revolution in England: The Transformation of the Agrarian Economy 1500 to 1850*' Cambridge University Press: Cambridge
Oxford Archaeology North (2007) *Borrowdale, Cumbria, historic landscape survey, volume 1*, unpubl report [cited in OA North (2009)]

Oxford Archaeology North (2009) '*Nether Wasdale Historic Landscape Survey. Volume 1: Archaeology Report and Figures'* OA North: Lancaster.

Powell J., Lake j., Gaskell P., Courtney P. & Smith K (2019) '*Developing an Ecosystem Approach – drystone walls.*' Research Report Series no 43/201. Historic England.

Putnam R, Leonardi R. and Nanetti RY. (1993) *'Making Democracy work: civic traditions in modern Italy'* Princeton University Press: Princeton, NJ.

Pretty J & Ward H (2001) 'Social Capital and the Environment' *World Development* Vol 29(2) 209 to 227

Smith NT, Merritt JW & Phillips ER (2023) High-resolution 3D geological modelling of heterogeneity in poorly exposed glacial deposits using sedimentary and glaciotectonic architectural element analysis: a case example from Sellafield in west Cumbria, UK' *Quarterly Journal of Engineering Geology and Hydrogeology* 56 (1). https://doi.org/10.1144/qjegh2022-022 [good overall summary of glacial drift history]

Thomas C (1992) 'A cultural-ecological model of agrarian colonisation in Upland Wales.' *Landscape History* Vol 14 p37-50.

Throsby D (1999@ 'Cultural Capital' *Journal of Cultural Economics* 23: 3-12

Toghill P (2000) '*The Geology of Britain: an Introduction'* Swan Hill Press: Shrewsbury

UNESCO World Heritage Site inscription database: https://whc.unesco.org/en/list/422/ Accessed: 29/01/24

Wilson T (1913) '*The Shepherds Guide*.' Lancaster. Held at Carlisle Archive Centre, Ref: DSO135/117

Winchester AJL (2000) '*The Harvest of the Hills: Rural Life in Northern England and the Scottish Border 1400-1700'* Edinburgh University Press: Edinburgh

Winchester AJL (2004) 'Moorland Forests in Medieval England' p21 to 36 in: Whyte ID & Winchester AJL. '*Society, Landscape and Environment in Upland Britain*.' Society for Landscape Studies supplementary series 2 ISBN0953971112

Winchester A & Crosby A (2006) '*England's Landscape: The North West*.' English Heritage & Harper Collins: London

Winchester AJL (2022) '10 Nether Wasdale Common, Cumberland' 00215 to 221 in: '*Common Land in Britain'* Boydell: Woodbridge

Wu C-C. & Tsai H-M (2014) A capital-based framework for assessing coastal and marine social–ecological dynamics and natural resource management: A case study of Penghu archipelago. *Journal of Marine and Island Cultures (*2014) 3, 60–68

APPENDICES

Methodology

Primary Data Collection

Farmer Interviews

Semi-structured interviews were conducted with 11 Wasdale farmers to gather both qualitative and quantitative data regarding the cultural and social aspects within the farming system of the valley. These interviews primarily took place face-to-face at the participants' farms, although telephone interviews were utilised when logistical constraints arose.

During the interviews, various data collection methods were employed. The main interview involved a questionnaire covering a range of topics related to the farm, farming practices, and social interactions. Space was allocated within the interview for open discussions, allowing participants to raise topics and concerns, thereby enriching the qualitative dataset. Additionally, a social group network questionnaire was administered to identify farmers' connections to other groups within the valley, with ample space provided to delve into these connections and provide contextual details about the relationships. Finally, a mapping exercise was conducted where participants were asked to mark their hefts on a collective map of the wider region. This exercise facilitated discussions on heft-related issues, the functioning of communal grazing systems, and any observed changes therein.

Visitor Survey – Wasdale Show

A visitor survey was conducted at the Wasdale Show on 14th October. Eleven questions were asked, of which the summative results are shown below:

1. Where have you come from today?

Farmer	Local	Visitor
3	19	6

- Two thirds of respondents were local (from within 20 miles)
- The third of respondents not identified as local can from an array of locations. Two from as a far as Kent and Scotland, the rest from the wider North Western Region, predominately the urban centres of Manchester and Liverpool.

2. Have you been to the show before?

- Only 15% had never attended the show previously

3. What has brought you to the show?/What have you come to see at the show?

- Almost half (13) of all participants identified the sheep showing as the main reason for attending event.
- The second most common response (5) was to visit the craft tent
- Local farmers also identified the events as a good opportunity to meet friend and acquaintances.

4. Do you think these events are important?

- 11 participants identified it as an important event to support local hill farming community
- whilst the same number (11) saw its as a celebration of the traditions of the uplands and it's heritage
- 8 participants saw its importance as a showcase for the local farming system and opportunity to educate.
- 7 participants specific those form the local farming community, identified its importance as social event.
- There was a significant difference in reasons depended on background. Locals and those in the hill farming community identified it as a social event which helped bring the relatively isolated community together. A significant number of these interviews also identified it as a opportunity to showcase their work and lifestyle to visitors.
- The visitors themselves both local and from farther a field saw the event as a celebration of the upland way of life and its traditions. They were more likely to use words such as 'heritage' whilst those within the community saw it more as a part of their everyday community life.

5. What part do you think the local hill farming community play in the show?

- "*No show without them*' mentioned by many interviewees
- The shepherd's meet and sheep showing was identified as the central component of the show. this view was voiced by both local and non local.
- Local and farming participants were also able to identify the central role the local farming community plays in the organisation of the event.

6. Would you still attend the show with out contributions form local farmers?

A small number might still attend based on the unique location but vast majority said they would not attend without the involvement of local farmers. The main reason links to Q5 with interviewees highlighting the centrality of the community to the show.

7. What contribution role do you see the local hill farming community playing in the area?

Local perspective- the farmers and their sheep maintain the landscape and vegetation including cultural heritage including walls, buildings etc (majority view)
Farmers as Guardians of the landscape, responsible for teh maintenance of culture and traditions of the uplands

Visitors perspectives - farmers maintain paths and trails, access to landscape, shows and events

A number of participants allows indemnified farmers a a key support to the local communities, '*They would collapse without the hill farmers*'

8. Would you attend if it was held outside the Wasdale valley?
Vast majority no, the reason being valley. its landscape was seen as a central attraction fo the show. It provided a sense of place and local character.

9. What features define the Wasdale landscape for you?
Selection of most common responses:

- The lake/water
- The fells
- Hefted flocks, hill sheep
- Big skies
- Dramatic scenery
- Stone walls
- Crags and Screes

"Perfect backdrop to celebrate hill farming'

Very similar amongst interviewees although a strong focus on the landscape features not much focus on the communities, farms etc.

Q10. What part does landscape play in enjoyment of teh show.
All participants identified the landscape as playing a significant part in their enjoyment fo the show.

Common statements:

"Perfect backdrop'
"Spectaular landscape"
"In awe of this beautiful valley'

Q11. Connection between landscape and community
Indicative quotes:

"with out the farms their wouldn't be this magnificent landscape'
most local people working in the landscape

'they come hand in hand'

'the local community keep the landscape as it is'

'the landscape dictates the rhythm of the farming calendar'

“It’s their life”

Second Data Collection

Shepherds Guides

Shepherd guides for 1829, 1879, 1913, 1937, 1967, 2005 and 2023 were analysed. This analysis focused on identifying which hefted flocks were recorded for Nether Wasdale and Wasdale Head, along with which farms they were attached.

The data were then collated and trends sought using Excel charting functions.

Grey literature

Information from a range of unpublished reports was gathered and analysed. This included historical landscape surveys completed by the National Trust, the Lake District Partnership and National Park.

Records from Cumbria Records Centre electronic catalogue was used, but unfortunately the documents held at Cockermouth Castle (coded DLEC), for the land previously owned by various landlords though to the current day, could not be accessed due to ongoing renovation works.

A range of published materials (books and academic articles) relevant to the study area focusing on geography and history were synthesised to provide landscape and cultural heritage details and are listed in the References.