

Morgan, Owen (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. (Unpublished)

Downloaded from: https://insight.cumbria.ac.uk/id/eprint/7300/

Usage of any items from the University of Cumbria's institutional repository 'Insight' must conform to the following fair usage guidelines.

Any item and its associated metadata held in the University of Cumbria's institutional repository Insight (unless stated otherwise on the metadata record) may be copied, displayed or performed, and stored in line with the JISC fair dealing guidelines (available <a href="here">here</a>) for educational and not-for-profit activities

### provided that

- the authors, title and full bibliographic details of the item are cited clearly when any part of the work is referred to verbally or in the written form
  - a hyperlink/URL to the original Insight record of that item is included in any citations of the work
- the content is not changed in any way
- all files required for usage of the item are kept together with the main item file.

### You may not

- sell any part of an item
- refer to any part of an item without citation
- amend any item or contextualise it in a way that will impugn the creator's reputation
- remove or alter the copyright statement on an item.

The full policy can be found here.

Alternatively contact the University of Cumbria Repository Editor by emailing <a href="mailto:insight@cumbria.ac.uk">insight@cumbria.ac.uk</a>.

# Gathering the broken Heft





Owen Morgan

University of Cumbria



# Site Context - The English Lake District



Mungrisdale

Workington

Buttermere and Brackenthwaite

Bampton and Deepdale Askham

Kinniside

Langstrath & Coombe

Stockdale
Nether Wasdale
Birker

Eskdale

Revenglas

Birkby

Ulpha

Torver

Sellafield High Banks

Waberthwaite
& Corney
Bethecar)

Buttermere
Watterdale
Langdale
Askham
Shatterdale
Anbleside

Revenglas

Birkby

Waberthwaite
& Corney
Bethecar)

• Millorn • Ulverston Wharton at retrieved 7/7/23 from https://cumbriacommoners.org.uk/commons-in-cumbria

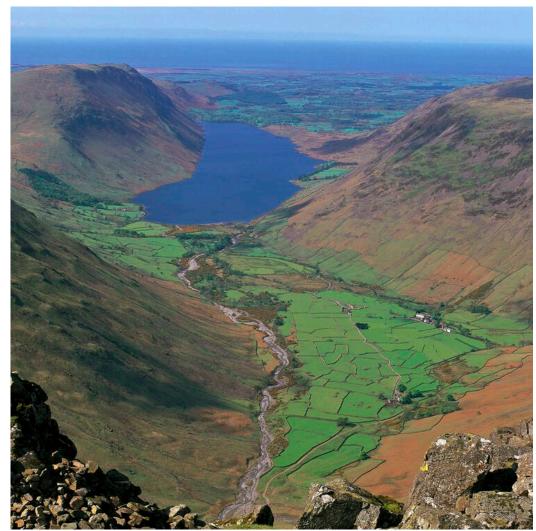
The English Lake District (ELD) is an area located in the North West of England that is renowned for its picturesque glacial valleys and lakes. It has a rich cultural heritage shaped by centuries of continuous agropastoral farming, which has earned it UNESCO World Heritage Status (UNESCO, 2017).

This integrated system has remained unchanged in the ELD fells for centuries (Winchester, 2000). Some experts even speculate that its origins can be traced back to Viking settlers in the 11th century BCE (Baldwin et al., 1985).

The agro-pastoral system in this region consists of small traditional farming units that raise flocks of indigenous hill sheep breeds, specifically adapted to thrive in the limited grazing conditions of the hilly landscape (Bowles, et al, 2014).

28% of the ELD is common land, which is land owned by a person or organisation over which other people, commoners, have legal rights; predominately to graze livestock. (LDNPA, 2023)

The sustainable utilisation and management of this semi-natural vegetative resource rely on a collaborative grazing management system practiced by groups of hill shepherds (Mansfield, 2011).



retrieved 7/7/23 from https://www.nationaltrust.org.uk/visit/lake-district/wasdale



retrieved 7/7/23 from http://helderherdwyckfarm.com/the-herdwick-sheep.htm

# The agro-pastoral system

### Hefting



http://lakesworldheritage.co.uk/blog/2020/april/02/what-is-hefting/

A mechanism whereby the traditional hill sheep breeds become familiar with specific sections of the common land due to historical shepherding practices (Mansfield *et al*, 2006).

These sheep naturally regard these areas as their home and pass down this knowledge to their offspring (Hart, 2004)

Connection so strong that flocks belong to farms and hefts. They are retained ever when farms are sold or tenacious change hands (LDNPA, 2023)

### Gathering



https://www.skylark-aerialphotography.co.uk/filming-for-zdf-television-in-eskdale/

Shepherds manage the semi-natural vegetation and their flocks of sheep through a process of communal gathering, which takes place 2-3 times annually and involves all shepherds with flocks in a given area of common land (FCL, 2023).

Shepherds have to draw on their social networks and traditional cultural knowledge to undertake gathering (Morgan, in prep)

Process is aided by specific aspects of cultural heritage of the system, for example smit and ear markings (Brown, 2009)

## Method

Ethnographic data collection undertake in two parts - firstly through taking part and attending key ELD hill farmer activities and events

### Gathering



An activity part taken in gathering activity proving opportunity to understand the mechanisms of hefting and gathering.

Observe and talk with shepherds whilst gathering see first hand the difficulties

### Herdwick Sheep Sales



Significant cultural event where hefted sheep are brought for sale

### **Shepherd Meets**



Significant cultural event where hefted sheep are brought for competition

Observed and talked with farmers about issues relating to hefts and gathers

To support the ethnographic findings a series of 24 semi-structured interviews were undertaken with hill farmers form the English Lake District and surrounding areas

All interviews, notes and field notes form activities transcribed and coded within NVivO, developed a number of themes removing around pressures, changes and breakdown of the traditional system.

# Findings - System breakdown - Causes

The main finding was that the traditional system of hefts and gathering is under increasing pressure and in places is beginning to break down



https://www.bbc.co.uk/news/uk-england-cumbria-51183134

Climate change was seen to be starting to have a effect on the traditional management system of hefts and gathers:

- changes to grazing vegetation
- increased summer heat endangering livestock and shepherds
- flood events and soil erosion

However, the most significant impact are being seen in schemes designed to engage with climate change and wider environmental issues:

### **UK** governmental policy:

- agri-environmental scheme
- move to public good agenda

https://audioboom.com/posts/8227798-natural-capital-ecosystem-markets-and-green-commerce

### **Socio-economics**

- financial marginality of the tradition system
   vs
- Growth of Natural capitals finance



https://audioboom.com/posts/8227798-natural-capital-ecosystem-markets-and-green-commerce

# Findings - System breakdown - Governmental Policy

This system has been managed by Natural England, with the main focus in the region of study of the paying of shepherds to reduce livestock from commons:



Effect:

The reduction in sheep numbers has seen the traditional balance of hefted sheep shift historic hefts breaking down and sheep seen to roam more extensively over common land

Impacts:

Gather process increasing difficult as livestock more spread out

Mechanism through which grazing could be managed becoming ineffective



Effects:

Shepherds being paid to removal all sheep from common

Impacts:

Reduction in shepherds number decreases the effectiveness of gathering
Loss of knowledge form the system, with older, more experienced farmers more likely to take teh payment and retire from teh common

## Findings - System breakdown - Socio-economic

The traditional pastoral system of the ELD has been financial marginalised for many years, this now coming into conflict with the increasing investment in Natural capitals, particular carbon offsetting schemes.



Impacts:

Farms and Common land being sold to carbon off set schemes

Effects:

Reducing access to common land, thus less hefting and gathering

Reducing number of shepherds within gathers, loss of knowledge



Impacts:

Change of landlord priorities, leading to sales of land and favouring non hill farming tenants

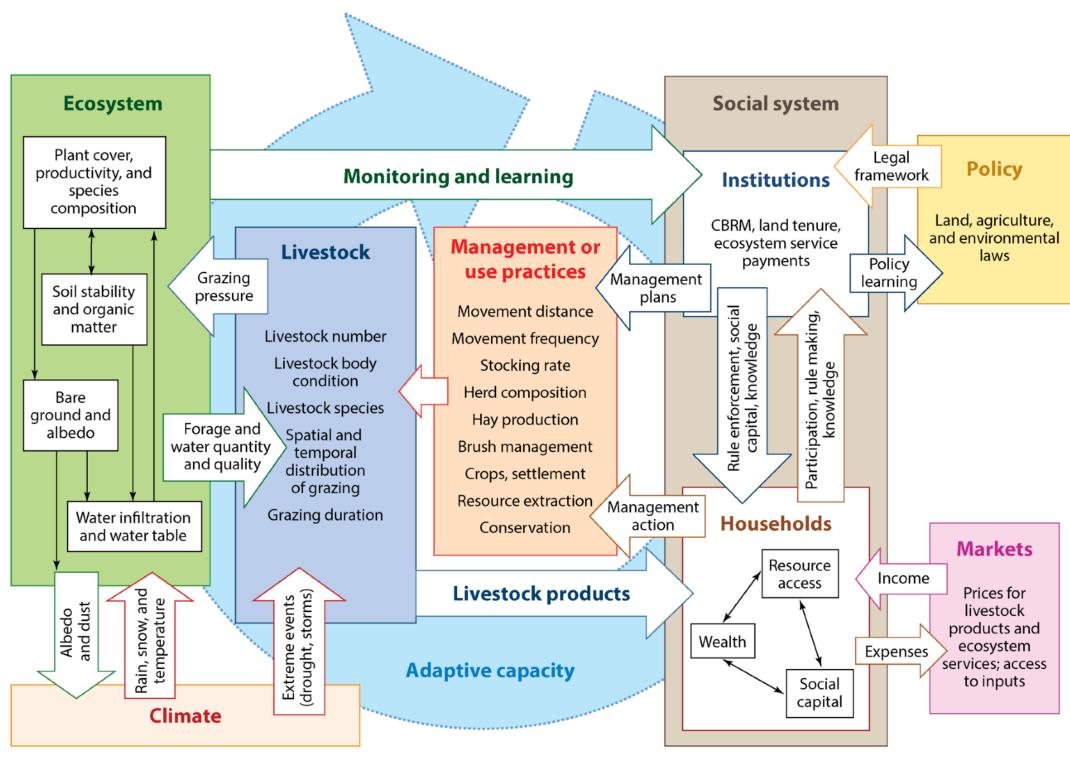
Effects:

Fewer shepherds in gathers reducing effectiveness

Reduction in access to farms and land esp. for younger generation leading to intergeneration knowledge transfer of hefting and gathering skills

## Connection to Global context

### Findings appear to align with studies of agro-pastoral communities globally



Reid RS, et al. 2014.

Annu. Rev. Environ. Resour. 39:217–42

Other studies have identified that traditional pastoral communities are negatively impacted by rapid changes in climate, socio-economic conditions, and governmental policies (Reid et al, 2014; Rego et al, 2022).



These threats have serious implications for the intergenerational transmission of knowledge (Srithi et al, 2009; Reyes-García et al, 2013).

Reduction land use rights for common resources and policies that restrict key practices (Herrero et al, 2016; Belayneh and Tessema, 2017).

Even minor losses to this cultural heritage can have cascading effects on the entire system (Ford et al., 2020).

## What can be done?

### Increased research into traditional shepherding systems within the UK.

The ELD is just one of multiple traditional shepherding systems operated in the UK, more data would allow a richer something of these system on a national scale

### Increased co-production of knowledge between shepherds and governmental agencies.

Allowing for more nuanced policy and implementation mitigating the impact of new agri-environmental schemes of traditional system

### Improved guidance for landowners operating in the ELD

Improving knowledge around the implication of small changes to the something traditional system, particularly when considering farm/land sales

## Additional support for farmers to access natural capitals markets

Allowing farmers to benefit from these new diversification opportunities

### Refs

Brown, G. (2012) Herdwicks: Herdwick sheep and the English Lake District. Cumbria: Hayloft Publishing Ltd.

Federation for Commons. (2023). Commons in Cumbria. <a href="https://cumbriacommoners.org.uk/commons-in-cumbria/">https://cumbriacommoners.org.uk/commons-in-cumbria/</a>

Ford, J. D., N. King, E. K. Galappaththi, T. Pearce, G. McDowell, and S. L. Harper. 2020. The resilience of Indigenous peoples to environmental change. One Earth 2:532543. https://doi.org/10.1016/j.oneear. 2020.05.014

Hart, E. (2004). Hefting in Practice: The Ancient Craft of Grazing the Open Hills. Edward W. Hart.

Herrero, M., J. Addison, C. Bedelian, E. Carabine, P. Havlík, B. Henderson, J. Van De Steeg, and P. K. Thornton. 2016. Climate change and pastoralism: impacts, consequences and adaptation. Revue Scientifique et Technique 35:417-33

LDNPA, 2023. Common land, <a href="https://www.lakedistrict.gov.uk/caringfor/farming/common-land">https://www.lakedistrict.gov.uk/caringfor/farming/common-land</a>

Mansfield, L. et al. (2006) The heft: a multifunctional management tool. Taylor & Francis.

Mansfield, L. (2011) Upland agriculture and the environment. Badger Press.

Reid, R. S., M. E. Fernández-Giménez, and K. A. Galvin. 2014. Dynamics and resilience of rangelands and pastoral peoples around the globe. Annual Review of Environment and Resources 39:217-242. <a href="https://doi.org/10.1146/annurev-environ-020713-163329">https://doi.org/10.1146/annurev-environ-020713-163329</a>

Rego, J., Cabo, P. and Castro, M. (2022) 'Pastoralism, multifunctionality, and environmental agency: Insights from mountain sheep pastoralists in Northern Portugal', Journal of agrarian change, 22(4), pp. 766–786. Available at: <a href="https://doi.org/10.1111/joac.12480">https://doi.org/10.1111/joac.12480</a>.

Winchester, A.J.L. (2000) The harvest of the hills: rural life in Northern England and the Scottish borders, 1400-1700. Edinburgh: Edinburgh University Press.