

Maximising the Margins

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Challenges and opportunities for remote and fragile areas: setting the scene

Davy McCracken

Head of Department of Integrated Land Management

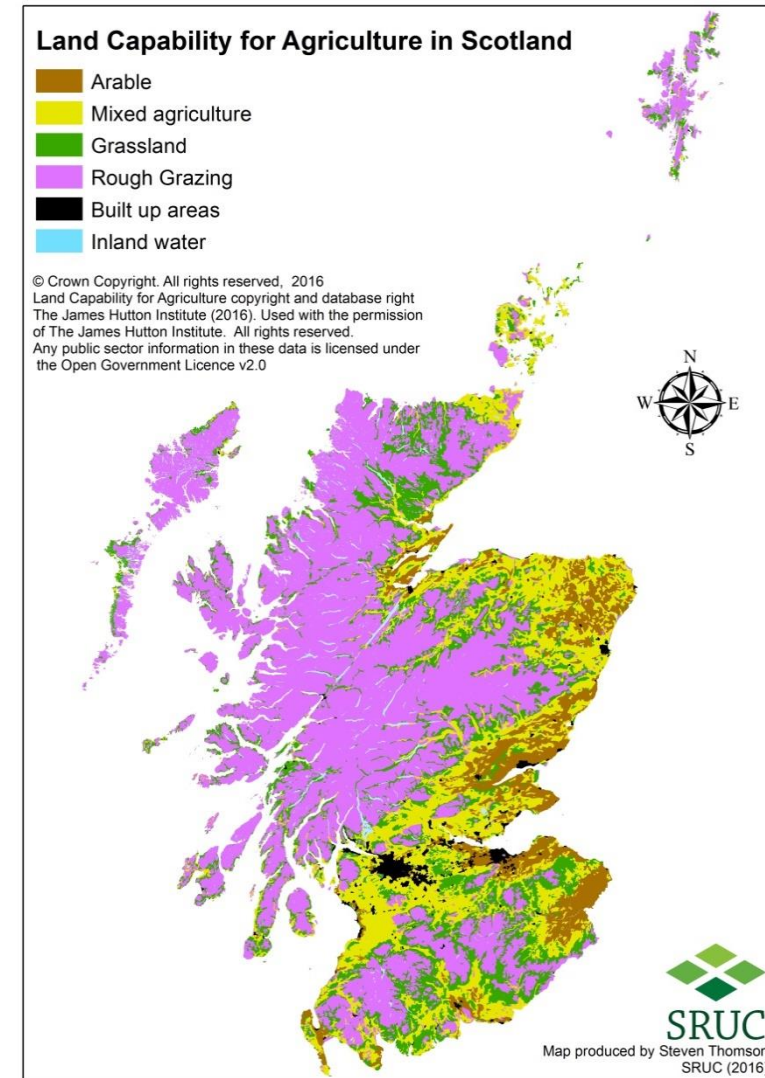
Head of Hill & Mountain Research Centre



Leading the way in Agriculture and Rural Research, Education and Consulting

Constrained Farming Systems

- Significantly constrained by poor land (85% classed as Less Favoured Area)
- About 54,000 agricultural holdings in Scotland covering 5.7 million ha
- Around 20,000 farm businesses claiming direct CAP support
- Around 19,400 registered crofts (about 13,000 crofters) with about 1,100 common grazings (covering 584,000 ha = 10% of UAA)



Range of agricultural production challenges

- Low productivity
- Poor nutrition
- Pests and Disease
- Climate change
- Predation

Low lambing percentages in spring and/or

Low survival of lambs through to autumn



Who are Scotland's hill farmers and crofters?:



**They are the managers of nearly 70%
of Scotland's agricultural land.**

As such they have a key role to play:

- **In maintaining food production**
- **In managing the wide variety of habitats and species occurring on that agricultural land**
- **In providing a wide range of other public benefits to society**

What are the tools in the hill farming box?

Inbye grasslands

- *Soil pH and nutrients*
- *GHG emissions*
- *Grassland management*
- *Forage & fodder improvements*

Hill grazing

- *Bracken control*
- *Improving hill parks*

Sheep Performance

- *Genetic selections*
- *Blackface and Lleyn*

Flock Performance

- *EID associated kit*
- *TST worming of lambs*
- *Comparison of system trade-offs*

Auchtertyre flock

- *Restocking*
- *Blackloss*
- *Yellowses/Plochteach*

Technology

- *Virtual fencing*
- *Drones for assessments*

LoRa network

- *Tracking livestock*
- *Sensors*

Systems approach to Precision Livestock Farming

PLUS:

- **Diversification**
- **Integration of woodland**
- **Agri-environment rewards**



Sparsely Populated Areas of Scotland

<http://www.hutton.ac.uk/research/projects/demographic-change-remote-areas>

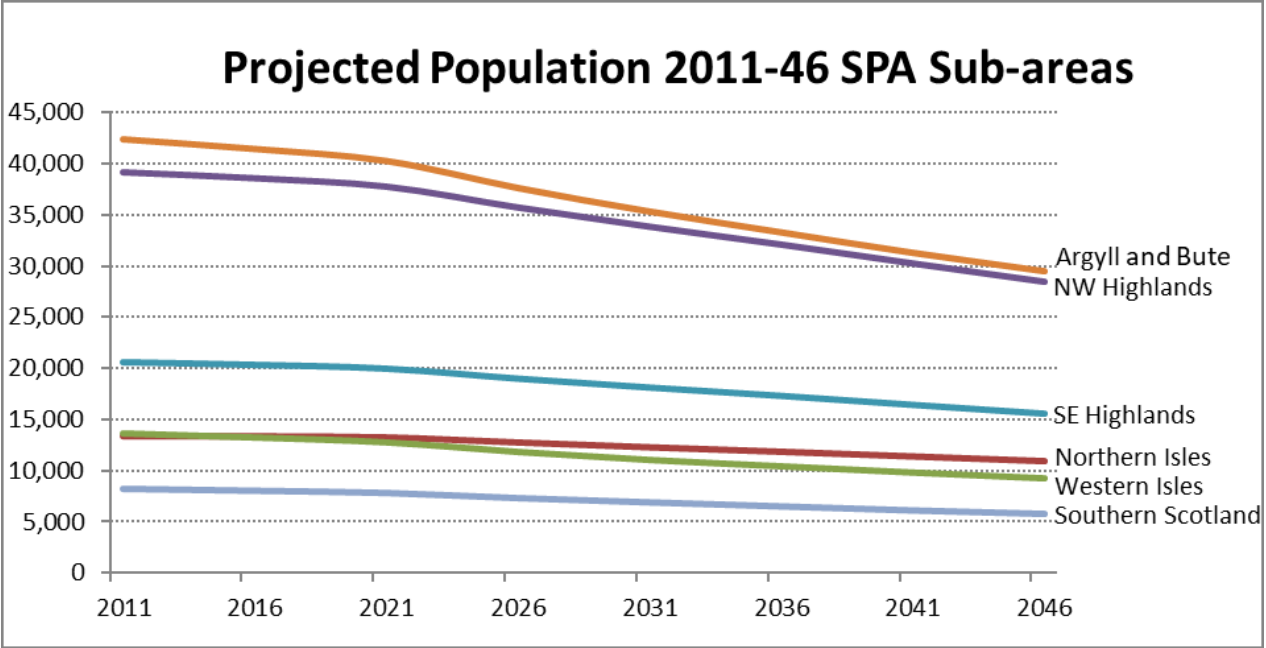
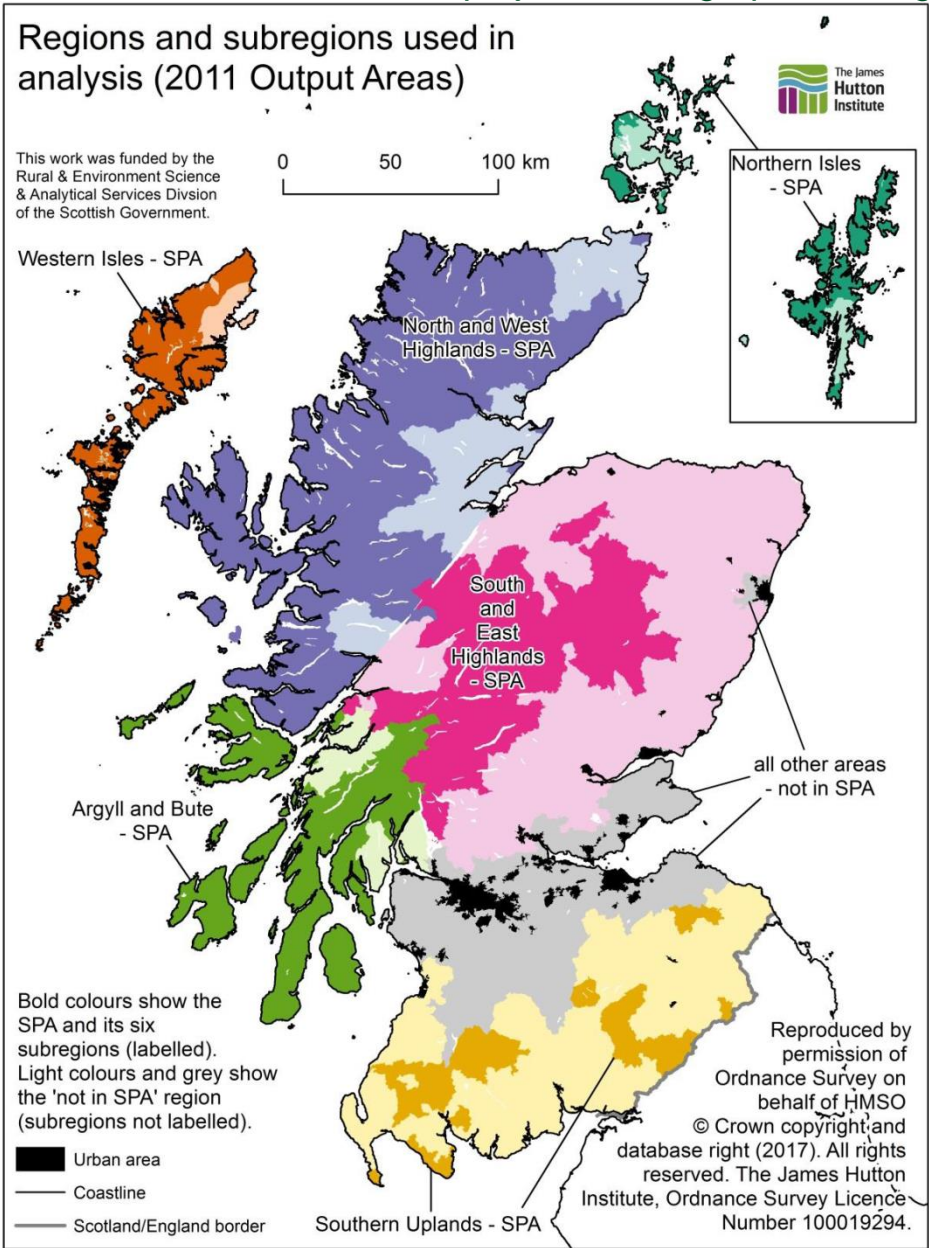


Table 4: Annual Net Migration Requirement required to halt shrinkage in the SPA and Sub-Regions 2016-2046 (persons)

	2011-15	2016-20	2021-25	2026-30	2031-35	2036-40	2041-46
	Persons						
Northern Isles	5	21	95	87	78	85	86
Western Isles	65	77	157	125	96	97	95
NW Highlands	112	151	374	333	304	333	335
SE Highlands	54	73	184	158	147	161	163
Argyll and Bute	159	189	445	357	308	308	276
Southern Uplands	37	42	93	77	71	74	66
Scottish SPA	432	553	1,348	1,137	1,005	1,058	1,021

Upland conversations

THE PRESS AND JOURNAL
Monday, January 21, 2019

FARMING 33

Issues affecting viability of hill farming sought

Events: Three workshops to identify ways forward



OUTLOOK: While many challenges are likely to be shared across the uplands, others could be more localised

In his monthly column, SRUC's Professor Davy McCracken says co-operation is critical in assessing and addressing hill farming problems

Change is always unsettling.

Even more so when potential high-level changes – such as access to international markets for lamb or the size of future Less Favoured Area Support Scheme payments – are not easily influenced by individual hill farmers and crofters.

But there are other challenges – such as improving livestock productivity, identifying grassland mixes better suited to the environment or marketing livestock products locally – which are more within any individual's direct control.

Many of these challenges are likely to be similar across the uplands of Scotland, but the importance of any one issue is likely to vary from area to area.

Differences in climate, landscape and access to

markets also mean that the solutions appropriate for any one issue may differ markedly from one part of upland Scotland to another.

So it is not surprising that a major constraint to addressing some of these issues can revolve around knowing what options may be available locally, what

"There can certainly be strength in numbers"

might already have been tried by someone else or how best to implement a change on the individual hill farm or croft.

However, a problem shared is a problem halved and there can certainly be strength in numbers in trying to identify and tackle any individual issue.

To this end, I am

Farming THE PRESS AND JOURNAL
Saturday, March 23, 2019

News 3

Hill farm and conservation interests 'must speak as one'

BY COLIN LEY

The need for Scotland's hill farming and conservation interests to speak with a "common voice" was the main conclusion to emerge from the launch this week of a UK-wide series of hill and upland debates.

Conservation and farming representatives meeting at Lurgan Farm near Aberfeldy kicked off the seven-event series with an assessment of what hill and upland farming is delivering for the economy, environment and society, followed by a discussion on what policy and support changes may be needed to help both sides achieve their potential.

"There are an awful lot of demands being placed on hill and upland areas," said Professor Davy McCracken, head of integrated land management at SRUC, which funded the meeting.

"Common asks range from producing food on a purely agricultural basis to meeting a wide

spectrum of environmental requirements, such as restoring peatlands and planting trees.

"The challenge for both sides, farming and conservation, is to work together to address these various outcomes and to do so in a way that is sustainable long term.

"We don't have any one body which speaks for both sides"

"Whatever outcomes are eventually decided should be achieved by the hills and upland, whether environmental, hill farming or both, it's clear that the management of this mix will be absolutely vital going forward," he said.

The Lurgan meeting also generated a lot of discussion and concern about the fact that upland and hill farming systems are already very fragile, with the prospect of

becoming even more fragile in the future, depending what happens with Brexit.

"If, for example, we lose a significant number of hill farmers and crofters in the months and years ahead, then we'll lose the ability to have any influence on how these large areas of Scotland are farmed and managed," said Prof McCracken.

"Ironically, although the areas we're talking about account for about 70% of our total land area, we don't have any one body which speaks for both sides of the land use debate.

"If we're to get policy makers and the wider public to understand what hill farmers are already doing and what these areas can achieve in the future then we need to start speaking with a common voice."

The next stop in the series will be in the Lammernmuirs on April 24, heading towards a final Scottish event held as part of the Cairngorms Nature: Biz Weekend on May 10.



The meeting heard that a lot of demands are already being placed on farmers in hill and upland areas



Hill Farming & Crofting – *Drivers need to link for success*



SRUC receives research funding from the **Rural & Environment Science & Analytical Services Division** of the **Scottish Government** through their **2011-2016** and **2016-2021 Strategic Research Programmes**

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- The **European Commission's H2020 Research & Innovation Programme**
- **Defra** under the **ERA-NET SusAn (Sustainable Animal Production) Programme**
- **Global Food Security's 'Resilience of the UK Food System Programme'**, with support from **BBSRC, ESRC, NERC** and **Scottish Government**.



Innovation = Doing Things Differently



Precision Agriculture
and the
Internet of Things (IoT)



- Minimising costs / maximising production efficiency
 - Tracking
 - Maintenance
 - Theft protection
- Promoting sustainability
- Livestock welfare
- Economic viability of farms
- Environmental compliance



Engineering & Technology

Systems
& ecology



Knowledge
Transfer



Biological Sciences

