Mob Grazing Field Lab

Trying new things, together

As farmers find themselves in the frontline of our climate change emergency, new ways of working are becoming essential. But trying new things can be risky and difficult, so it helps to be in it together.

Soil Association Scotland has brought together a group of 16 farmers and crofters in a field lab to explore the potential of a new grazing system to build soil carbon, improve animal health and performance, reduce the costs of straw and winter feed and increase biodiversity.

Mob grazing, sometimes referred to as holistic planned grazing, is a rotational grazing system with a high stocking density, regular moving of livestock (every 1-3 days depending on the season), and a long recovery period, leading to taller plants with deeper root systems, and greater sward resilience.

Soil Association licensee Sam Parsons is estate manager at Balcaskie, a 1100 hectare mixed farm in Fife that's in organic conversion. Balcaskie are in their third year of mob grazing and Sam says the system is transforming the farm.

"Next year we're going to be mob grazing the whole lot – that's 350 cows!" he says. "It's completely changed the way we manage our grassland and we're looking at producing beef differently too. We've seen increased diversity in the grass, an increase in rooting structure and better drainage. We outwintered 25 cows this year and fattened a few outside and they were perfectly happy. Next year we'll outwinter 80."

He says without the field lab he would have needed "some serious persuasion" from the estate owner to make such a huge change. "It's given me confidence to try it. We know we don't have all the answers, but someone else in the group might. Who could I ask otherwise? In farming usually there are a million people telling you what to do and it involves buying something. This is peer-to-peer instead."

Building an evidence base

The field lab members are in different parts of Scotland, with different sized farms, at different stages of trying out mob grazing. But under the stewardship of our Farming and Land Use Manager Clem Sandison, they are supporting each other through meetings and a WhatsApp discussion group. Working with soil scientist Dr. Joanna Cloy from Scotland's Rural College (SRUC) they are also establishing baselines to measure soil health and carbon levels, and will be benchmarking their own farms to track outcomes.

This table outlines their goals and planned measurements:

Goal	Measurement method
Improved soil health (including increased organic matter content, better soil structure, improved water infiltration, greater biological activity)	SAC Soil Health Test – routine soil analysis, plus PMN, VESS scoring, earthworm count
Increased soil carbon levels	CN (Carbon and Nitrogen) analysis
Improved animal performance	Days to slaughter / live weight gain. Importantly, some people will be extending rather than shortening their days to slaughter as a result of switching from a grain-based diet to 100% grass-fed. Another measure could be kilos produced per hectare.
Improved animal health	SAHPS (Scottish Animal Health Planning System) PCHS (Premium Cattle Health Scheme) Faecal egg counts / worm resistance Fertility rate
Increased length of grazing season and reduce costs of winter housing	Grazing records Animal days per hectare Annual straw / winter feed costs
Improved forage quality	A complex one to measure as grazing taller herbal pastures is a different model to a perennial rye grass system. It depends on what you define as a quality forage and we're still exploring this.
Improved sward density and diversity	Quadrat assessment and grass/herb identification guides
Increased biodiversity	We will work with partners to survey birds, invertebrates, small mammals etc.

For more info visit **http://bit.ly/Mob_Grazing** or email **csandison@soilassociation.org**

"One of the things we've noticed at Wester Logie Farm is the increase in bees and other pollinating insects encouraged by the extra clover and chicory flowers in the sward. On a still summer's day you can actually hear the buzzing!"

- Kate Elliot (Wester Logie Farm, Fife)