



**Geographical scope:**  
Scotland (East-West grazing collaboration)



**Organisation name:** Scottish Rural College (SRUC), Aberystwyth University (ABER), Fergus Younger (SAOS)



**Number of participating farmers:** 6 farms (3 grazing/fodder exchanges)



**Total budget:** 3000 euro  
**Funding:** Horizon 2020

## A bit more about the Case Study

The case study aims to demonstrate the financial and environmental benefits of integrating livestock into arable farming systems. In the project, specialised livestock and arable farmers collaborated to graze sheep on cover crops/leys sown in arable rotations. There is a desire amongst farmers, and pressure from farming policy, to improve the sustainability of arable systems through improved nutrient recycling, improve soil structure, and increased C sequestration/retention and livestock system through improved feed use efficiency.

The farmer network were interested in how the arable farmers could best go about introducing leys/cover crops (a new potential source of livestock feed) in their arable rotation, how the livestock farmers could graze those crops and then measure the impacts in terms of soil quality indicators, crop and livestock performance. The network had worked together previously on a similar livestock/arable collaboration project and therefore all ready had trusted relationships between farmers and with the network coordinator (SAOS)

## Highlights



An opportunity to meet with farmer networks from other countries (e.g. France) to share learnings about collaborative mixed farming systems



Developing on farm research skills (e.g. Measuring the volume and nutritional content of crops) that can be applied on individual farms and within the network in the future to further advance knowledge



Developing new learning around how to practically implement collaborative mixed farming in central Scotland (e.g. cover crops to sow, sowing dates, grazing intensity, arable vs livestock farmer needs etc.)

## Website and project information

<https://projects.au.dk/mixed/networks-national-teams/united-kingdom>

<https://projects.au.dk/mixed/>



## Key outcomes and insights

### Innovative features

The livestock/fodder exchange introduced a collaborative grazing model, enabling arable and livestock farmers to share resources efficiently. By using mobile fencing, temporary water systems and the livestock farmers grazing management skills, the initiative demonstrated an effective way to re-integrate livestock into arable rotations. Structured field trials, designed and implemented by the farmer network provided a data-driven approach toward optimizing the mixed farming benefits

### Environmental and socio-economic benefits

The introduction of cover crops and manure inputs from grazing sheep, in the long term, will improve soil structure and biodiversity and increase carbon sequestration. Integrating livestock in the arable rotation reduces reliance on chemical fertiliser inputs for the arable farm and also provides a source of intestinal parasite free grazing for the livestock - boosting the resilience of both systems. There was no impact on livestock growth rates, nor on arable crop growth - which when taken with the reduction in chemical inputs from both arable and livestock systems suggests a neutral or slightly positive economic impact. The cooperative model fosters knowledge sharing, innovation and stronger community ties



Photo by Christine Watson

## Good practices & Lessons learned

### Problem 1. Infrastructure costs for arable farms

Many arable farms lack fencing, water supply, and handling facilities, making it expensive to introduce livestock



**Solution 1.** Arable and livestock farmers collaborate, with the arable farmers providing a suitable cover crop for grazing over the winter and the livestock farmer providing the grazing management skills and temporary fencing and water supplies. The cost to the livestock farmer of grazing the winter crop is agreed with the arable farmer by mutual consent, making it financially viable for both parties

### Problem 2. Lack of livestock management expertise on arable farms

Many arable farmers lacked experience in managing livestock



**Solution 2.** By collaborating with livestock farmers it becomes unnecessary for the arable farmer to learn livestock skills - the livestock farmer is responsible for all aspects of the grazing management, including temporary fencing and water supply. Livestock farmers are used to this type of grazing arrangement for sourcing winter feed on other farms and the arable farmer can focus on growing a good crop for the livestock to graze

### Problem 3. Challenges in building trust between arable and livestock farmers

Establishing reliable partnerships between arable and livestock farmers was challenging due to differing farming practices and distances



**Solution 3.** External facilitation by SAOS helped mediate agreements, organize networking events, and provide best practice examples to strengthen relationships

### Problem 4. Difficulty in quantifying environmental benefits

Farmers find it challenging to measure the environmental benefits of integrating livestock into arable systemse



**Solution 4.** Comparative studies are conducted using experimental field trials to measure soil health, biodiversity and livestock/crop productivity measures



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