

## Integrating lamb production into arable rotations using multi-species swards

Interest in introducing livestock to what have traditionally been arable cropping rotations continues to increase. AHDB Beef & Lamb have funded a project which aims to look at the concept of integrating lamb production into an arable cropping situation and to investigate the opportunity to increase business resilience for both livestock and arable crop producers.



Potentially, this concept could be an effective means of increasing scale and subsequent productivity for livestock units throughout England, as it represents an opportunity for new entrants to the sheep industry or for established enterprises to expand.

The integration of both systems could also help mitigate various issues that currently face arable crop producers, including poor grain prices, herbicide resistance, reduced fertiliser efficiencies and diminishing soil health. Sheep may be able to achieve the same or higher net margin per ha compared to traditional arable rotations, with the additional benefits of improved soil conditions, reduced inorganic nitrogen (N) applications and increased yields in subsequent arable crops.

### The project

Sam and Charlotte Clarke, of Clarke Farming Partnership, operate a mixed livestock and cropping enterprise at Steeple Aston, Oxfordshire. With support from AHDB Beef & Lamb and Germinal GB Ltd, the couple intend to investigate the potential to increase their flock numbers by introducing leys into their arable rotation.



A 10ha field has been divided and half was drilled in late August with a standard grass and clover mix (control) and the remaining area with a multi-species sward (see Table 1).

The species were selected based on early results from work being carried out at [University College, Dublin](http://www.ucd.ie)

Table 1: The leys being sown by Sam and Charlotte Clarke

Type	Variety	Control (kg/ha)	Multi-species sward (kg/ha)
Diploid perennial ryegrass (intermediate)	AberMagic	4.9	
Diploid perennial ryegrass (intermediate)	AberGreen	7.4	7.4
Diploid perennial ryegrass (intermediate)	AberWolf	7.4	7.4
Diploid perennial ryegrass (late)	AberAvon	7.4	
Diploid perennial ryegrass (late)	AberChoice	7.4	
White Clover blend	AberPasture	2.4	3.7
Timothy	Presto		2.4
Chicory	Puna II/Tonic		4.9
Red clover blend	Rozeta/Merviot		3.7

AHDB Beef & Lamb hopes that this and other ongoing integrated crop and livestock projects will act as a blueprint for those considering integrating both production systems.

[Events](#) will be planned for later in the year and throughout the project.