

CASE STUDY:

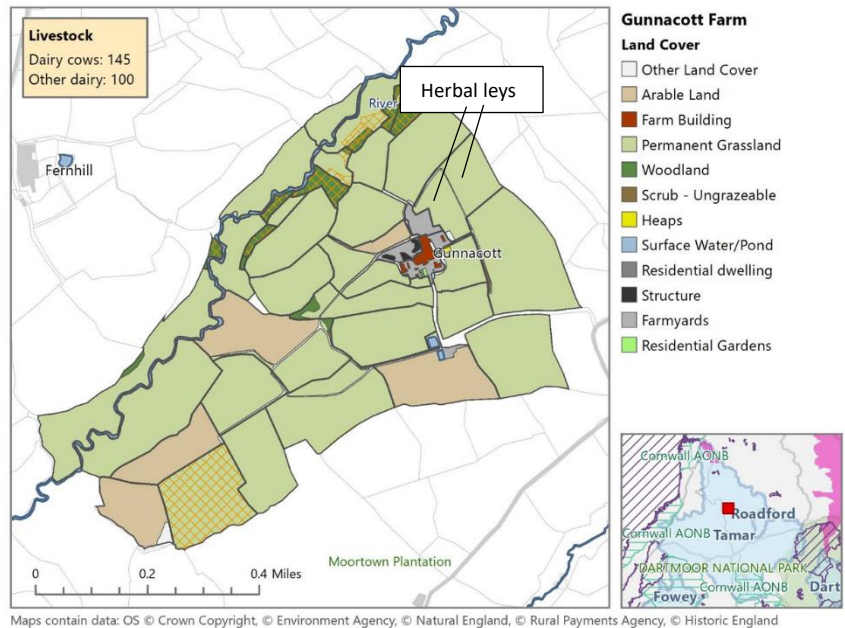
Can multi species
swards be established
using a low impact, low
disturbance cross drill?

Herbal Ley Trial at
Gunnacott Farm,
Tetcott, Cornwall

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Background to farm & catchment

Gunnacott Farm is a 110ha all grassland farm stocked with a herd of autumn calving Holstein Friesian dairy cows. The farm is in the parish of Clawton and within the catchment of the river Claw. The land is managed in three distinct management regimes, grazing platform, 4 cut silage platform and less intensively managed grassland adjoining the river. The herbal ley trial area is within the grazing platform.



What was the aim of the Trial / question you were trying to answer?

Can a multi species sward be established using a low impact, low disturbance cross drill?
And does the species mix effect establishment under these planting techniques?

What was undertaken / methodology used ?

A 4ha grass field was cultivated in summer 2022 with a catch crop to help control soil borne pests, and then in autumn half the field would be sown with a complex multi-species herbal ley containing 18 species (Hurrells HM28). The other 2ha would be sown with a simple herbal ley mix containing only 10 species (Cotswold Seeds mix23). This would allow ongoing comparisons of the two approaches to be monitored.



What was the outcome and how will it be monitored?

The main aim was to monitor how each seed mix established, following the non-inversion cultivation and drilling. This has historically been a barrier for Tamar farmers experimenting with herbal leys. It is hoped that the success of non-inversion tillage for the establishment of herbal Ley can demonstrate and provide confidence to other local farmers who are contemplating the inclusion of herbal leys in their rotations. On farm workshops are planned to show local farmers the results and discuss the benefits. Soil carbon levels and livestock performance will be monitored over the long term.



What were the farmers thoughts? Would they continue with the trial?

The farmers are now looking at increasing the area of herbal leys within their grazing platform. The **success and confidence they have gained** from completing this trial has encouraged them to **adopt this management at a much faster rate** that they originally anticipated, which will **reduce the quantities of artificial nitrogen fertiliser** the farm uses in the future. This has environmental benefits from improved water and air quality, whilst also reducing the farm costs and dependence on artificial fertiliser.

What is the benefit to SWW / the customer / the environment?

The environment benefits in several ways:

- **Improved water quality and air quality** from reduced fertiliser use.
- **Improved soil health** from the deep rooting nature of some of the species within the herbal leys, this improves soil structure, increases water infiltration, and increases organic matter in the soil.
- The flowering species within the seed mix, and diversity of sward structure, will **provide food sources and habitats for invertebrate species. This in turn will provide food sources for species further up the food chain.** This is anecdotally supported by comments from the farmers who have said they are already noticing a large increase in the number of bats they are seeing flying over the fields since the herbal leys were established.