

# Transition to agroecological approaches

## Durie Farms, Leven, Fife

After taking over from his father, Douglas decided to explore ways of future proofing the farm. A main objective was to improve soil health, increase soil organic matter and biodiversity. He converted one third of the farm and the livestock enterprise to organic in 2006 and the rest of the conventional arable area has not been ploughed for roughly 20 years.

Douglas started to re-evaluate the inputs that were used when the father stepped down, with the aim to reduce fixed costs and future proof the farm.

For the arable enterprise, Douglas got interested in direct drilling, and after doing some research, thought the approach could hold great potential. Direct drilling proved very tricky to begin with, and there was limited experience around to benefit from. However, Douglas decided to persevere. He incorporated other conservation agricultural principles such as growing cover crops and increasing species grown on the farm for diversity. This has led to increased organic matter and improved soil health. There has also been experimentation with companion cropping and intercropping; mixing oilseed rape and cereals with various legumes, such as oats and beans, oilseed rape and peas, vetch and oilseed rape and peas and barley, with varying degrees of success. Douglas is going to continue with these practices this year. Though experimentation can be a hassle, it is certainly rewarding when it works.

When Douglas took over the beef herd in 2005, financial analysis showed that the suckler cows on the farm were not really paying their way, so he decided to enter them into conversion to organic farming to improve profitability. He also grows some organic cash crops.

The difficulty was getting used to messier fields as it is against the mainstream norm in farming. For Douglas, based on his experience, it is more important to focus on the monitoring for the long-term goals of the farm (improving soil fertility by getting more carbon into the soil), rather than short-term profitability, even if there are short-term set-backs, for example in terms of yield penalties. Patience and flexibility are the words.

Among his new plans, Douglas now wants to further reduce his reliance on artificial nitrogen and other synthetic inputs such as pesticides and is taking active steps in exploring mob grazing.

**"The soil health, and spin-offs coming from this, is like future proofing the farm. Carbon into the soil through photosynthesis is like putting money in the bank for a rainy day."**



**Douglas Christie**

**540 ha, mixed farm, family owned**

**Organic Livestock Production, Conservation Agriculture\***

\*200 ha mixed organic livestock based enterprise & 340 ha conventionally farmed arable rotation using conservation agriculture principles