



'It's a win-win for us and the environment'

What does sustainable farming mean in practice? Monaghan drystock farmer Wesley Browne is showing how it can be done profitably

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The world's population is expected to rise from 6.7 billion in 2009 to 9.2 billion by 2050. Global food production will need to rise dramatically. The problem is that many food production practices are influencing our environment and climate in a very negative way.

The greatest agriculture challenge of our time is to achieve global food security while reducing, eliminating and, ideally reversing, environmental damage.

Sustainable agricultural practices offer a solution. It means farming in a way that has environmental, social and economic dimensions. In simple terms, it means farming profitably while enhancing the environment to the benefit of all.

To play its part in combatting climate change Irish agriculture must

reduce its greenhouse gas emissions (GHG) by 25% by 2030. While it won't be easy, we can achieve this target if practices and actions to reduce GHGs are quickly adopted by all farmers, whatever their enterprise.

The Teagasc-led Signpost programme is a multi-annual campaign to lead and encourage climate action by all Irish farmers.

The programme includes a network of demonstration farms across the country that will be adopting these mitigating actions to reduce GHGs and enhance biodiversity. The lessons gained and actions adopted by these farmers will be showcased for all farmers in their regions to see.

Wesley Browne, is one such farmer. Farming just outside Monaghan town he calves 90 cows in spring with all males finished as under 16-month-old bulls and yearling heifers sold as breeding stock. "Our land is typical of Monaghan which means it is fragmented; the soil is heavy and many of our fields are sloping," says Wesley.

In terms of economic sustainability, the farm is in a strong position. In 2022, the gross margin was €1,399 per hectare.

"We are primary producers of beef and I believe that a 'greener' image will be a big positive for the farm. If we want to survive we need to showcase that efficient farming can be done in an environmentally friendly way.

"I'm committed to reducing the production of greenhouse gases on the farm which will reduce my overall carbon footprint," says Wesley.

'Green' and efficient

"The majority of the steps we are taking to reduce GHGs also make the farm more profitable. So I see them as a win-win for us and the environment."

The following are some of measures he has taken to reduce harmful GHGs such as nitrous oxide, methane and ammonia include:

- The only type of chemical nitro-



Wesley Browne calves 90 cows at his Monaghan farm with all males finished as 16-month-old bulls and yearling heifers sold as breeding stock

gen Wesley uses is protected urea. Protected urea results in much lower nitrous oxide emissions than CAN and is also cheaper per unit of N.

- Wesley has taken soil samples to help him build soil fertility in a targeted way and, where necessary, to correct the soil pH. Raising the pH to 6.5 means that the soil will release 64 units/N/acre naturally and the efficiency of chemical fertiliser is enhanced.

- To build the P and K indices, Wesley's fertiliser of choice is now 18.6.12 rather than low P and K blends. The fertiliser programme only includes 18.6.12 and protected urea.

- Slurry is applied using a LESS slurry spreader. This reduces ammonia emissions and also increases the N value from 6 units to 9 units/1,000gal. Wesley prioritises areas like silage ground.

- "I've certainly focussed on better grassland management," says Wesley. The overall aim is a long grazing season with the herd consuming high quality pasture. In 2022 the grazing season lasted 280 days a high figure for the location. Wesley has divided the land into 42 paddocks which he says allows him to grow more grass and to manage it effectively.

- He operates a very efficient suckler herd which is hitting all the key performance indicators including:

- 1 calf/cow/year
- 360 day calving interval
- 100% calving in 11 weeks
- 96% of the heifers calve at two years of age. This is a big lever when it comes to reducing GHG on farms and can lower GHGs by 12%.



Wesley is aiming to increase clover content, reduce age at slaughter and maximise carbon capture.

A proactive approach to carbon capture

Looking at his future farm sustainability steps, Wesley says he is aiming to increase the clover content in the swards. "This will help reduce our fertiliser usage. In preparation for clover, we have applied lime at two tons/acre, docks and weeds have been sprayed off. We plan to sow clover in April next year.

"The other big area we are targeting to reduce GHG production from the farm is to further reduce the age at slaughter. Currently, the bulls are finished at 15.3 months. I feel that we can reduce this age by pushing the males more at the weaning stage.

"This year we started forward-creep grazing and will introduce meal earlier in the autumn. The target is to reduce the average age at slaughter to 15 months."

Wesley says he wants to be proactive in terms of capturing carbon. "There are different hedge types on the farm so we are putting a plan in place on how we will manage these hedges over the next few years to maximise carbon capture."

● Wesley will be hosting a farm walk on Wednesday, September 13 at 5.30pm, Eircode: H18R921. All are welcome.