LIFE Carbon Farming

Newsletter #11 - September 2026

Welcome to the eleventh issue of the Irish newsletter for LIFE Carbon Farming.

Building on the momentum of recent activities at the All-Island Agriculture and Land Use conference, this edition highlights dissemination of LIFE Carbon Farming at national open days and Future Beef events. The issue covers BEEF 2026 and the Farming for Better Soil Health open day at Johnstown Castle, along with recent farm open days held by Olivia Hynes, John Dunne, and James Skehan.

National Beef Open Day – BEEF 2026

Teagasc's biennial National Beef Open day returned to Grange, County Meath on 1 July. The theme of BEEF2026 was "Driving Sustainable Performance". Since the previous open day, the financial return from beef production has improved considerably with an uplift in cattle prices contributing to healthier incomes on suckler beef and dairy calf to beef farms during 2025. This year's event presented the latest research, technologies and advice to support profitable, sustainable and resilient beef production. Labour supply, work-life balance and succession were in focus during the event, reflecting their importance to the long-term sustainability of beef production.

Attendees at BEEF2026 listening to talk on "Securing your future in beef farming"

LIFE Carbon Farming featured within the suckler beef village as part of the Future Beef Programme. Recent findings from the programme's demonstration farms highlighted the strong adoption of actions that support productive and profitable suckler beef production, while decreasing greenhouse gas (GHG) emissions per unit of output, commonly known as carbon footprint. In 2025, nearly 80% of chemical nitrogen fertiliser was applied in the form of protected urea and 99% of slurry was applied with low emission slurry spreaders such as trailing hose. The average Replacement index rose from €106 in 2021 to €127 in 2025, and 77% of replacement heifers calved between 22 and 26 months of age. The LIFE Carbon Farming board outlined how baseline carbon audits and farm-specific action plans are being used to estimate potential carbon emission savings on participating Future Beef farms. Actions adopted by the farmers included optimising beef finishing age, improving herd health and soil fertility, planting hedgerows, and improving slurry timing and application through low-emission slurry spreading.

The digital sustainability platform AgNav was used to monitor GHG emissions from the participating beef farms. In the 2022 baseline year, carbon footprint averaged 12.1 kg CO_2 equivalents (CO_2 eq)/kg

liveweight and total GHG emissions averaged 350 tonnes CO_2 eq per farm. Projections using the Carbon Agri method indicated average carbon emissions savings of approximately 142 tonnes CO_2 eq per farm over five years. The potential carbon revenue was presented as well, ranging from approximately €1,420 per farm at €10/t CO_2 eq to €4,260 at €30/t CO_2 eq. However, the lower average price on the global voluntary carbon market would not cover the project's preliminary estimate of monitoring, reporting and verification (MRV) costs. These figures remain indicative and depend on the projected savings being verified and an appropriate funding mechanism being established. The Irish project team has also recently held discussions with aggregators in France whose clients have expressed potential interest in purchasing carbon certificates generated by beef farmers.

The national event provided an excellent opportunity to discuss the design and operation of carbon farming projects with farmers, advisors and other attendees. Topics raised included projected carbon saving, potential revenue, MRV costs, integrity issues within the voluntary carbon market, and the current exclusion of livestock emissions from the EU Carbon Removal and Carbon Farming Certification (CRCF) framework. The exchanges highlighted the importance of developing credible carbon farming models that deliver clear climate benefits for the public while remaining financially viable for family farms.

Further information on the topics presented at BEEF2026 is available on www.teagasc.ie/beef2026

LIFE Carbon Farming at Future Beef Farm Walks

During summer 2026, emerging project findings were presented at farm walks organised by the Teagasc Future Beef Programme with support from the programme's sponsors.

The Dunnes held the first farm walk near Portarlington, Co. Offaly on the 5th of June, attracting more than 250 attendees. John and James Dunne operate suckler beef and dairy calf to beef systems on approximately 103 hectares of grassland. The farm carries 79 spring-calving suckler cows. Further background on the Dunnes' herd is provided in issue 6 of this newsletter. An additional 17 hectares are used to grow spring barley, which is harvested, stored and rolled on the farm for feeding to the herd. Home-grown barley was estimated to have a carbon footprint around half that reported for imported feeds. Greater feed self-sufficiency can hence reduce dependence on purchased feed and lower the emissions related to the production of cattle diets. Additionally, the farm grows red clover, which reduces reliance on chemical nitrogen fertiliser through biological N fixation.

Farm productivity and financial performance improved markedly in 2025. Beef production increased from 731 to 821 kg liveweight per hectare, while gross output reached €2,839/hectare. After variable and fixed costs, the farm achieved a net margin before premia of €716/hectare compared to €11/ha in 2024. The carbon footprint of beef produced on the farm was

estimated at 9.98 kg CO_2eq/kg liveweight, illustrating how improvements in productivity and resource use can support both financial performance and climate action.

Spring barley approaching harvest time on the Dunnes farm

A second farm walk took place on Olivia Hynes's mixed beef and sheep farm at Kilcash, Co. Roscommon, on 29 July. Olivia farms around 70 hectares of grassland in two main blocks, 5.5 hectares of which are rented. The farm maintains 49 spring-calving suckler cows within a weanling production system, alongside 230 breeding ewes and 70 ewe lambs. Olivia has concentrated on enhancing breeding performance across both enterprises. Artificial insemination is used on the suckler herd, with replacements bred on farm and heifers targeted to calve at 24 months of age. Better grassland management and improvements in soil health and flock health have increased the share of grazed grass in the diet and enhanced animal performance.

The mixed beef and sheep enterprise generated a net margin before premia of €629/ha in 2025, a 19% increase on 2024 levels. The carbon footprint of beef production was estimated at 12.26 kg CO_2eq/kg liveweight.

Soil Health and Water Quality: Broader Benefits of Carbon Farming

The third Farming for a Better Future Open Day was held in Johnstown Castle on 10 June under the theme "Innovating for Healthy Soils and Clean Water". This

national event provided interactive demonstrations on approaches to improve soil health and water quality across grassland and cropping systems. Six principles of soil health were highlighted: 1) knowing your soils, 2) assess soil health, 3) avoid physical damage, 4) support soil biodiversity, 5) build or maintain soil organic matter and 6) maintain balanced soil fertility. Research on grass-clover swards, hedgerow carbon storage and methods for measuring and verifying carbon sequestration was also presented.

Many measures that benefit soil health and water quality can reduce the carbon footprint of livestock production as well by improving efficiency and reducing environmental losses. Correcting soil and maintaining appropriate phosphorus and potassium levels can improve grass growth and nutrient uptake. More precise targeting of slurry and fertiliser can reduce nutrient losses, while grass-clover swards can lower reliance on chemical nitrogen fertiliser. Hedgerows and riparian buffer margins can contribute to carbon storage, biodiversity and the protection of watercourses.

These wider benefits are relevant to the farm-specific carbon action plans developed through LIFE Carbon Farming. Although the project primarily assesses changes in carbon footprint, the actions implemented by participating farmers may also improve soil function, water quality and biodiversity. Recognising these co-benefits is important when assessing the overall value of carbon farming to farmers and the public.

These themes were explored further at the Future Beef Open Day held on James Skehan's farm in Bridgetown, Co. Clare, on 11 September. The event attracted great attendance and demonstrated practical ways to improve farm sustainability. James operates a spring-calving suckler-to-store/beef system across approximately 29 hectares of fragmented grassland. Cows and heifers are synchronised for artificial insemination (AI), alongside the use of a Limousin stock bull. Heifers are targeted to calved at 22-26 months of age.

The farm recorded gains in both productivity and financial performance during 2025. Beef output increased from 443 kg to 465 kg liveweight per hectare, while gross output reached €1,278 per hectare. After accounting for variable and fixed costs, the farm achieved a net margin before premia of €537/ha, compared with a financial loss of €690/ha in 2024. The farm's estimated carbon footprint was 11.96 kg CO_2-equivalent per kg of liveweight produced.

Soil fertility and biological activity are an important part of the farm's management approach. Red clover is incorporated into silage swards to enhance nitrogen fixation while also increasing the protein content of forage. Soil biological activity is assessed periodically using the cotton underwear soil test, a simple but well-recognised field experiment used to provide an indication of biological activity and decomposition in the soil. With the support of his local advisor, James uses the results as an additional practical indicator of soil health and grassland management.

LIFE Carbon Farming findings presented at the farm walk showed how James's carbon action plan combined improvements in breeding, grassland management, fertiliser management and soil fertility. These actions are projected to reduce the farm's carbon footprint by 11% and avoid 82 tonnes of CO_2 eq over 5 years. The projected carbon savings are currently estimated to have a gross value of €2,500, subject to verification and development of a suitable funding model. James's farm illustrates practical carbon-farming actions that can support soil health, farm productivity and progress towards more carbon efficient beef production.

Attendees viewing the LIFE Carbon Farming board at James Skehan's farm walk

Upcoming Events

The LIFE Carbon Farming will be represented at the Farming for Climate Conference and the event On-Farm Climate Solutions: New Opportunities for Business Cases.

See you in the next issue.

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- LIFE Carbon Farming Ireland
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