



Value-added farming

Innovation Green Farm Collective

Creating value from how you farm as well as income from what you produce is not always easy. *CPM* meets the Green Farm Collective, which is seeking to make this a reality for regenerative farmers.

By Mike Abram

Can you add value to your farm business by following regenerative agricultural techniques? The desire to do this is the central premise of the six founding members of The Green Farm Collective.

The six regenerative farmers, all former 'Soil Farmer of the Year' finalists, came together with a general desire to add value to the way they are managing their land, biodiversity, crops and ultimately the food they produce, explains Jake Freestone, farm manager for Overbury Enterprises in Worcestershire.

"We know we're farming in a more sustainable way than a lot of other types

of production systems, but we're not rewarded for that in the market. So we formed the Green Farm Collective, with the view to being able to quantify and capitalise on the carbon we're storing in our farming systems.

Biodiversity gains

"But carbon is only part of the story, and probably is going to be only a commodity in the future. We're very excited about the biodiversity we have on our farms, and how we've improved it with the way we are farming."

Across the farms, the Collective finds increased numbers of farmland bird species, insects and a diversity of flowers,

as well as protecting water courses from soil erosion, he says.

"Those are very tangible things for our customers. Improving soil carbon is good but more difficult to quantify, and harder to communicate to the public what it means.

"But farmland biodiversity — we're talking about things like farmland birds, wildflower meadows, hedgerows, in-field trees, small woodland parcels — is a lot more real and probably delivers a lot more benefit," he believes.

That's led the Green Farm Collective to design three packages to sell to prospective customers — one based on carbon and two on biodiversity, explains Jake.



The six regenerative farmers have come together to add value to their farming enterprises.



“ We’re farming in a more sustainable way ..., but we’re not rewarded for that in the market. ”

“The first of the environmental packages is based on in-field biodiversity within the crop. We know that by adopting no-till, prioritising soil health and reducing synthetic inputs, we have more wildlife in our fields where we’re growing our food. It’s a nice story to sell and contributes to the general improvement in wildlife and biodiversity.”

The second biodiversity package is centred on the more concentrated biodiversity areas around the edges of fields, beetle banks within fields, ponds, trees and wildflower meadows which the Collective will look to market on behalf of other people, he says.

Pricing for these biodiversity packages, which will be sold in 0.01ha units, has yet to be determined, although the ultimate aim is to replace the lost Basic Payment Scheme income.

The Collective is also exploring developing investment opportunities for other projects, such as specific wildlife enhancement or habitat creation, public engagement or education facilities or for biodiversity net gain projects.

“At the moment the Collective is just the six founding farmers, but we want to open it to other regenerative farmers who are interested in farming in a similar way and accessing these added value benefits.

“We believe Green Farm Collective is scalable, both nationally and potentially internationally. We’re not the only

regenerative farmers not being rewarded, so we want to build a strong home for those farmers too, and others who want to farm in this way in the future,” says Jake.

A subscription for Green Farm Collective will cost £125/year, which covers running the website, marketing and administration costs. In addition, the Collective will take a 10% commission on every investor transaction.

“Ideally we want to have enough farmers so that customers can invest in biodiversity or carbon in their own local community. If you’re a local business, investing in a carbon offset or biodiversity commitment that you can see on your way to work, or walk through on a footpath becomes more tangible.

“We’d also like to offer training or experience days for companies that are sponsoring some of our biodiversity. Bring your staff on to the farm for a farm walk, or to plant some hedgerow or trees, build dry stone walls, etc., which will be massive in connecting farmers and customers, and for customers to give the opportunity to upskill their staff.

“If we can structure that for our farmers, there’s potentially the extra opportunity to retail more produce through a farm shop, for example, and bring a community ‘feel’ between customer and farmer.” ■

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How does the carbon offer work?

Green Farm Collective will sell carbon certificates on an annual basis, but only if the farm is already net zero and has excess carbon available to sell, explains Jake.

The team will use Trinity AgTech’s digital assistant Sandy to calculate and generate carbon certificates for farmer suppliers.

“We’re hoping to be able to put customers in touch with local farmers. On the website we’ll have a map showing our farms so the customers can pick which farmer is nearest to offset their carbon.

“We’re working on a seamless transaction, effectively like a shopping basket, where you can put x units of carbon, and/or x units of biodiversity in the basket, pay for it, and that will then be deducted from the chosen farm’s available carbon or biodiversity.”

While the calculations Sandy uses for carbon footprinting are based on recognised international standards, currently the certificates generated will not be officially recognised. But according to Trinity AgTech, accredited certification will be in place this autumn, and the company is confident that the scientific methodology behind Sandy’s

output will meet all the requirements.

Trinity is helping the Collective take a robust approach to the verification of its environmental and carbon offerings. The aim is to give buyers confidence in the quantity, quality as well as the source of carbon and biodiversity indicators.

Despite the lack of initial certification, Jake expects the Collective to sell its carbon for a premium. “We feel because we are already net zero businesses, we will be selling genuine carbon, not a greenwashing carbon, so it will command a premium over the trading price.

“The co-benefits we can show with biodiversity and water protection will also help these credits command a compelling price,” he believes.

“Some businesses won’t be interested in that — they will just want to have the carbon offset. But there is another strand of businesses that are genuinely interested in trying to offset in a sustainable way and that is the sort of customer we will be chasing after.”

Sandy will also help screen potential future farmer suppliers, using their carbon footprint and biodiversity score to assess suitability.

Who are the founding members?



● **Jake Freestone,**
Overbury Farms, Worcestershire
Farming 1,600ha for Overbury Enterprises on the Gloucestershire/Worcestershire border, Jake says there are three main elements to how he's achieved net zero within his farming operations.

Switching to zero-till has reduced nitrous oxide and carbon emissions that occur during cultivation, while introducing cover crops helps add carbon to the soil.

But the key target has been reducing the use of nitrogen fertiliser, which equates to 54% of his carbon footprint. As well as trimming back fertiliser rates where possible, increasing soil organic matter and healthier bacterial and fungal populations helps store and cycle nitrogen, making more organic N available to crops.

In addition, he grows legume crops and integrates livestock into the rotation, which all adds up to being able to reduce the amount of purchased nitrogen applied.



● **Tim Parton,**
Brewood Park Farm, Staffordshire
Tim Parton began concentrating on soil health on his 300ha farm back in 2009, and now runs a regenerative system with biology at its heart.

Synthetic input use has been much reduced with insecticides, P and K fertilisers, plant growth regulators and seed treatments

eliminated, and he has only spent £50/ha on fungicides and £30/ha on herbicides in recent seasons.

He's also cut nitrogen inputs by a third using a combination of tactics, such as biological inputs — including N-fixing bacteria; sap analysis to tailor foliar nutritional feeds; and growing legume cover crops in the rotation.

A haylage enterprise means grass is part of the rotation, which also improves his carbon footprint.



● **Simon Cowell,**
Motts Farm, Essex
Home-made compost is a key ingredient in Simon Cowell's regenerative system on his 162ha of combinable and forage crops. He hasn't used tillage since around 2006 but, unlike the other members of the Collective, he has found cover crops difficult to introduce on his very heavy clay soils.

The compost, made from materials such as horse manure, topsoil, wood chippings and grass cuttings provide a food source for soil biology. He's especially keen to promote mycorrhizal fungi as he believes they are the key to healthy, stronger plants.

Rotation is also an important factor in his net zero journey. A healthy balance between winter and spring crops — including pulses, linseed and perennial crops, such as lucerne, and herbage seed have enabled a 50% reduction in nitrogen fertiliser.

● **Angus Gowthorpe,**
Approach Farm, Yorkshire
Multi-species cover crops, companion crops and biological inputs have helped Angus Gowthorpe transition away from a traditional tillage approach eight years ago to no-till establishment.



The changes he has made on his mixed enterprise farm, covering 160ha, has resulted in a dramatic increase in biodiversity, especially wild birds, as well as insects and brown hares, and a reduction in nitrogen use of 30%.

Cover or catch crops are used whenever there's at least a six-week gap between cash crops, with over-wintered cover crops mob-grazed with sheep, when conditions allow.

Around 50 Saler cows are grazed on grassland and provide farmyard manure for the arable fields, helping reduce nitrogen requirements.



● **Michael Kavanagh,**
Church Farm, Shropshire
Taking over the management of the 200ha arable farm in 2014, which prior to his involvement had a history of growing potatoes and vegetables, Michael Kavanagh introduced no-till, cover crops, a more diverse rotation and sheep.

The result has been increasingly improved soil health, with a much-reduced fuel and input bill. On drought-prone sandy clay loam soils, he grows milling wheat, oilseed rape, winter oats, spring barley and quinoa, aiming for premiums where possible.

Like many of the Collective, he's been able to eliminate his use of

bagged P and K fertiliser, insecticides and seed treatments, while reducing herbicide and fungicide use. He also uses foliar feeds and biological products to reduce and control diseases.

With relatively light soils he can overwinter sheep on cover crops and is also using them to naturally suppress disease through the grazing of crops.



● **Richard Suddes,**
South Farm, County Durham
Farming at an average altitude of 260m (850 feet) in the north of England is not the easiest place for a regenerative approach. But Richard Suddes is making it work on the 323ha mixed arable and beef farm, which he co-manages with his brother Karl, and in partnership with his parents. A further 161ha of arable is managed on a share-farming agreement.

He's been direct drilling since 2009, but says it's not the easy option, especially on some of the heavier soils. He's found the secret is drilling higher seed rates early, as soon as possible after the previous crop.

Cover crops play a role but work best on his farm when they're drilled in the spring. For a winter cover crop he uses beans drilled at a high seed rate, which helps improve soil structure. In recent years he's also grown a blend of winter peas and winter beans.

The pulses are used within a 98% home-grown ration to feed the 120 head Limousin herd, with the followers sold at 12-16 months, which he suggests is a better carbon footprint than grass-fed beef sold at 24 months.