

Agriculture

Agriculture and food production are crucial to the economy and environment of Somerset, employing over 10,000 people across the county, with 275,000ha of land being farmed. With a range of landscape types, Somerset has traditionally supported a range of farming types including arable. The predominant farm type is dairy and grazed livestock, with dairy the largest contributor to the southwest economy with the contribution listed as just over £1bn.

The narrative around farming and food security is one of complexity which is further impacted by climate change; rising temperatures, changing rainfall patterns and variations to atmospheric CO₂ concentrations will impact operations and productivity, as well as pest prevalence within the UK. Agricultural policy requiring ever increasing outputs to meet excessive consumer demand has resulted in practices intensifying over recent decades resulting often in the creation of large monoculture fields requiring high inputs of pesticides and fertilisers, loss of hedgerows and field margins, and pollution of water courses. On the Somerset Levels and Moors, an increase in the amount of maize grown for winter cattle feed, has led to increased erosion, diffuse water pollution and a drying of the soils. With 74% of Somerset land in agricultural use, the impacts of these changes has been significant for wildlife.

There is huge scope for positive change within the UK agricultural sector, securing nature and climate recovery – but it requires system change and an approach to the food environment which sees farming and the environment as mutually beneficial and interdependent. So a high level of ambition and transparency to deliver nature-friendly farming is needed within regenerative, agroecological systems, alongside fair deals for farmers to provide public goods such as nature

restoration, carbon sequestration and public engagement and increasing the demand for locally grown sustainable grown food across Somerset.

Some farmers and landowners may be in the position to deliver additional services from their land and to create new incomes, for example, providing flood storage or by exploring green finance mechanisms such as Biodiversity Net Gain (BNG) or nutrient and carbon trading- but there is a need for investment in infrastructure, capital items, skills and software tools to support this transition and the delivery of public goods that will benefit the health of Somerset's landscape, wildlife and residents.



So far, since
2005 Somerset's
CO₂ emission
has reduced by
34.6%

Case study: Ebbor Gorge Beef

Neil Tustian and Lottie Sweeney took over their 186-acre farm in 2018, which wraps around the top of Ebbor Gorge. The farm had previously been intensively grazed, ploughed, slurried and sprayed, creating a monoculture of rye grass and soils in poor health. Now organic, they are restoring the farmland and building up a stock of hardy, traditional 100% pasture-fed ruby-red cows that do well outdoors all year round. Wildlife is returning. Fields once used for growing high-yield crops are showing signs of recovery: wildflowers, whose seeds had remained in the soil, have begun to grow again including bird's-foot trefoil and field scabious. Waxcap mushrooms are returning, a sign of healthier soil as fungi, bacteria and more help bind and reconnect the soil so nutrients can be better recycled.

They use mob grazing to improve soil and pasture biodiversity. This means stocking smaller paddocks at a high density for short periods of time with long rest periods between. Taller vegetation resulting from the long rest periods, means the soil is kept cooler in the summer and warmer in the winter, which conserves water, leading to more biological activity in the soil in the summer and extends the growing season in the winter. Skylarks, meadow pipits and hares also love the taller vegetation.

They've planted thousands of trees dividing fields into shelter belts which shelter their cows in the winter so they don't need to be expensively housed and provide shade in the summer. They also provide a corridor for bats and birds, linking Ebbor Gorge with other parts of the farm, allowing them to commute, feed and connect with other suitable habitats.