

Farm Net Zero: Carbon footprint of the Real Food Garden

Figures are taken from November 2020 to October 2021 and calculated using the Farm Carbon Calculator

Overview

The Real Food Garden has been part of the Soil Carbon Project and now is one of the Farm Net Zero monitor farms. The annual analysis of soils under Amelia's and Chloe's management has demonstrated an increase in soil organic matter over the last three years.

The Real Food Garden is 3.89 ha and 4.5 tonnes of vegetables are produced per annum supplying customers in Wadebridge, Lostwithiel, Bodmin and St Columb Major.

The Real Food Garden is storing an additional 11 tonnes of carbon dioxide equivalent (tCO₂e) per year.

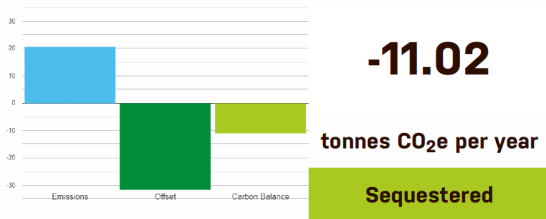


Table 1: carbon emissions breakdown

	Tonnes CO ₂ e	% Contribution to emissions
Livestock	7.2	34.9
Crops	6.0	29.0
Materials (consumables)	3.9	19.0
Inventory (equipment)	2.2	10.6
Fuels	1.2	5.7
Distribution	0.2	0.9
TOTAL	20.6	100

The hens, pigs and sheep as well as the 4 tonnes of bought in feed contribute the greatest amount of CO₂e to emissions.

This factsheet was produced by the Farm Carbon Toolkit on behalf of Farm Net Zero, a project led by farmers in Cornwall, exploring the contribution that agriculture can make to achieving Net Zero. This project is funded by the National Lottery Community Fund.

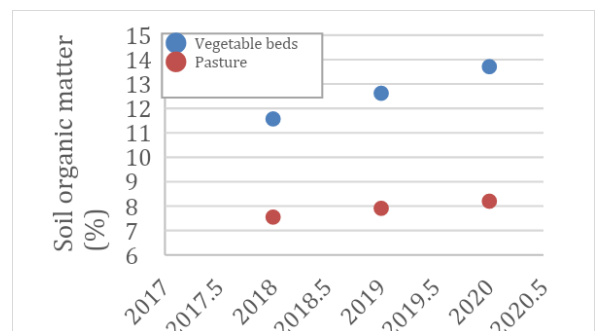


Increases in soil organic matter over the 3.89ha accounts for 19 tonnes of carbon dioxide equivalent per year.

Table: C sequestration from the Real Food Garden

	Tonnes CO ₂ e	% Contribution to sequestration
Soil Organic Matter	-19.0	60.2
Hedgerows	-7.0	22.0
Woodland	-5.3	16.7
Perennial Crops	-0.3	1.0
Field Margins (Uncultivated)	-0.1	0.2
TOTAL	-31.7	100

Graph to show soil organic matter levels in vegetable beds and in the pasture at the Real Food Garden in 2018, 2019 and 2020. The average increase per annum in the vegetable beds is 1.1% SOM, and in the pasture 0.3% SOM.



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