

# Scilly Organics 2018

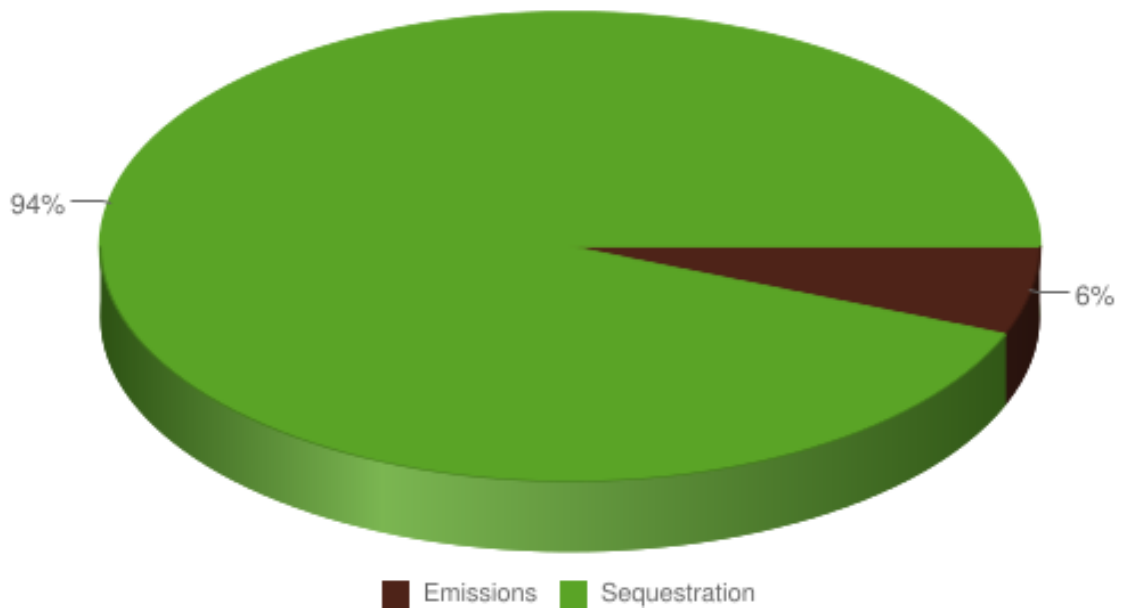
## Emissions

	C0 <sub>2</sub> e (kg/year)	% total emissions
<b>Fuel</b>	1,148	27.45%
<b>Materials</b>	626	14.97%
<b>Capital Items</b>	1,670	39.93%
<b>Livestock</b>	0	0.00%
<b>Fertility</b>	642	15.35%
<b>Agro-chemicals</b>	0	0.00%
<b>Distribution</b>	0	0.00%
<b>Waste</b>	96	2.30%
<b>Total:</b>	<b>4,182</b>	<b>100%</b>

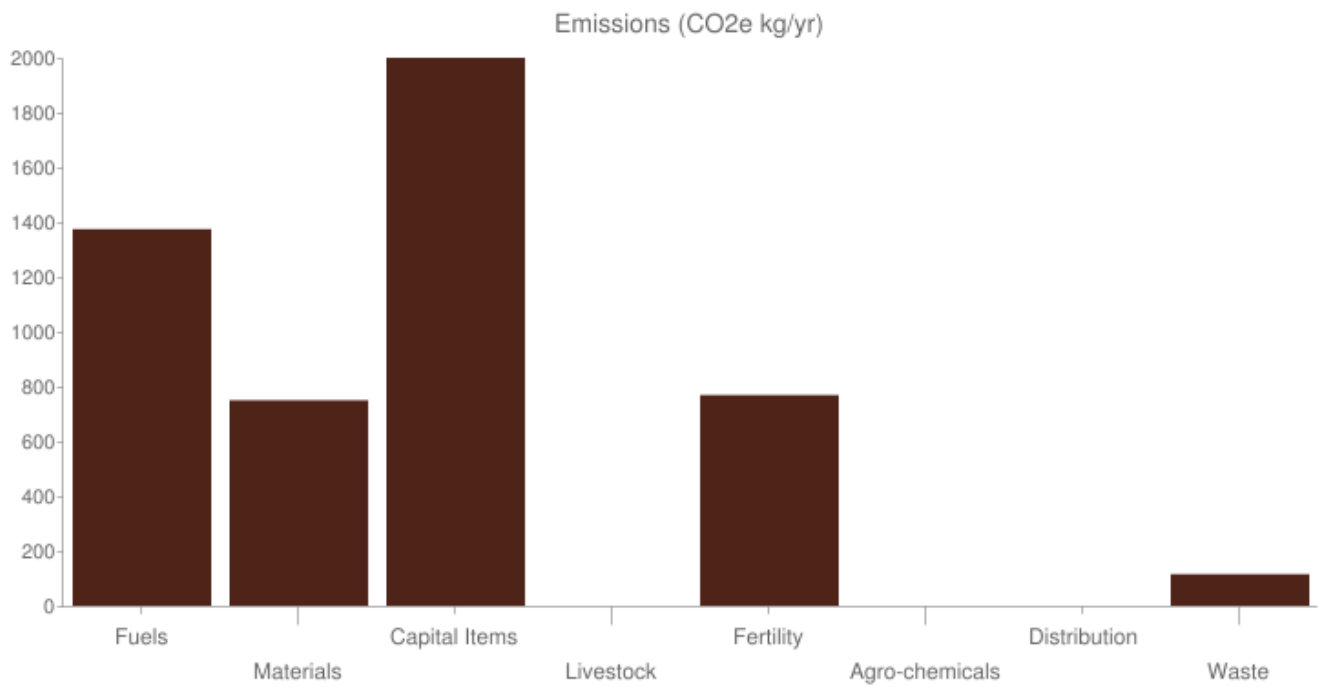
## Sequestration

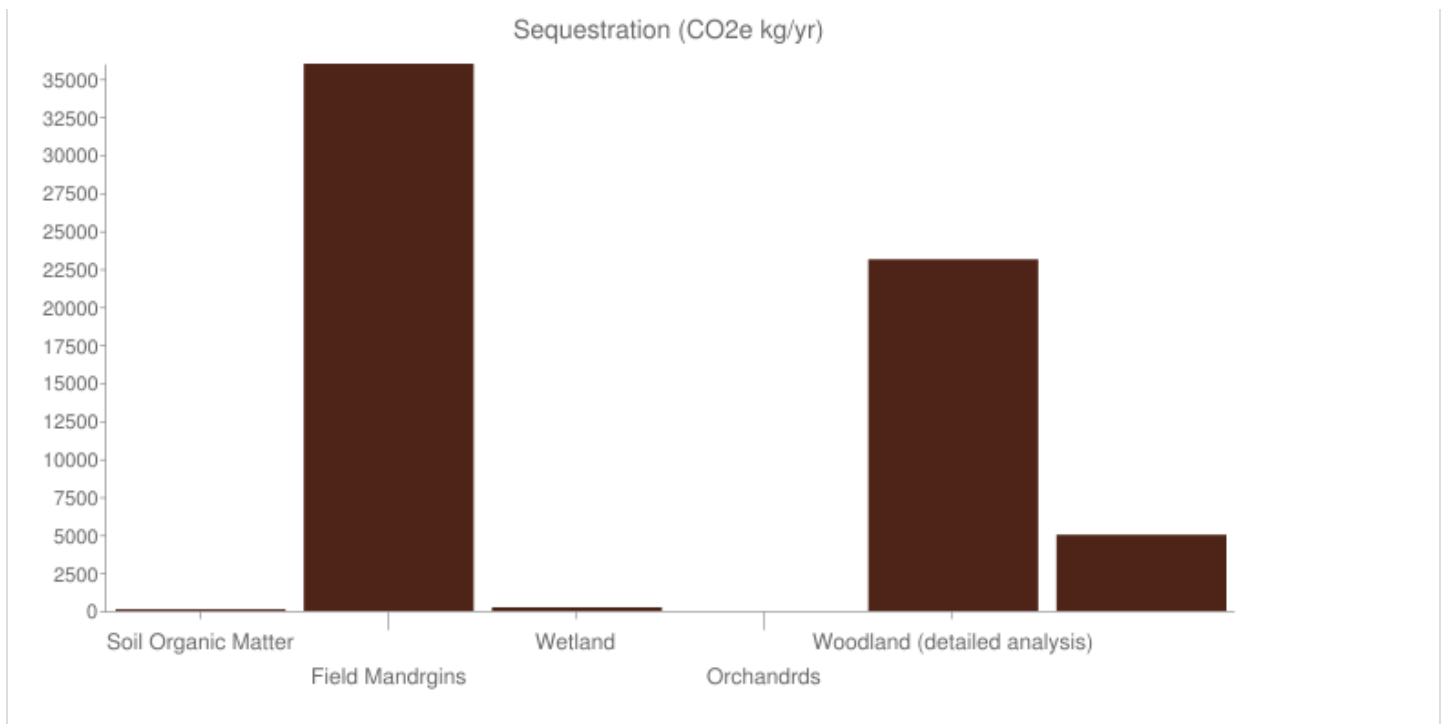
	C0 <sub>2</sub> (kg/year)	% total sequestration
Field Margins	111	0.17%
Soil Organic Matter	36,035	55.82%
Orchards & Vineyard	240	0.37%
Wetland	0	0.00%
Woodland & Hedges	23,154	35.86%
Woodland (detailed analysis)	5,020	7.78%
<b>Total</b>	<b>64,560</b>	<b>100.00%</b>

## Carbon Balance



**TOTAL CARBON BALANCE: -60,378 CO<sub>2</sub> (kg/year)**





## Emissions (detailed summary)

Page	Section	CO <sub>2</sub> e (kg/year)	% total emissions
<b>Fuel</b>	Contractors	0	0.00%
	Electricity	17	0.40%
	Liquid Fuels	883	21.11%
	Gas Fuels	0	0.00%
	Public Transport	98	2.35%
	Solid Fuels	150	3.59%
	Transport	0	0.00%
	<b>Total</b>	<b>1,148</b>	<b>27.45%</b>
<b>Materials</b>	Aggregates	0	0.00%
	Building Materials	9	0.22%
	Horticultural plastics and fabrics	13	0.30%
	Fencing	0	0.00%
	Metal	128	3.07%
	Miscellaneous	192	4.59%
	Wood	284	6.79%
	Water Systems	0	0.00%
<b>Total</b>	<b>626</b>	<b>14.97%</b>	
<b>Capital Items</b>	Building Materials	0	0.00%

Page	Section	CO <sub>2</sub> e (kg/year)	% total emissions
	Aggregates	11	0.26%
	Farm Machinery (self-propelled)	1,540	36.82%
	Fencing	0	0.00%
	Implements	0	0.00%
	Horticultural Constructions	90	2.15%
	Renewable Energy Installations	0	0.00%
	Water Systems	29	0.70%
	Metal	0	0.00%
	Road Vehicles	0	0.00%
	Wood	0	0.00%
	<b>Total</b>	<b>1,670</b>	<b>39.93%</b>
<b>Livestock</b>	Bought in feed	0	0.00%
	Livestock	0	0.00%
	<b>Total</b>	<b>0</b>	<b>0%</b>
<b>Fertility</b>	Arable Crops	0	0.00%
	Green Manures	268	6.40%
	Horticultural Crops	14	0.33%
	Lime	0	0.00%
	Mineral Fertilisers	0	0.00%
	Organic Fertilisers	354	8.46%
	Peat Soils	0	0.00%
	Plant Raising	7	0.16%
	Grassland	0	0.00%
	<b>Total</b>	<b>642</b>	<b>15.35%</b>
<b>Agro-chemicals</b>	Fertilisers	0	0.00%
	Sprays	0	0.00%
	<b>Total</b>	<b>0</b>	<b>0%</b>
<b>Distribution</b>	Distribution	0	0.00%
	<b>Total</b>	<b>0</b>	<b>0%</b>
<b>Waste</b>	Waste	96	2.30%
	<b>Total</b>	<b>96</b>	<b>2.3%</b>

## Sequestration

	CO <sub>2</sub> (kg/year)	% total sequestration
Field Margins	111	0.17%
Soil Organic Matter	36,035	55.82%
Orchards & Vineyard	240	0.37%
Wetland	0	0.00%
Woodland & Hedges	23,154	35.86%
Woodland (detailed analysis)	5,020	7.78%
<b>Total</b>	<b>64,560</b>	<b>100.00%</b>

\* Biological systems produce naturally variable emissions and sequestration levels.  
Treat results in brown as guidance rather than absolute.

**Report Date:** Sunday, October 28, 2018

▾ Fuels

**Solid Fuels:**

Description	Units	Annual Usage	CO <sub>2</sub> e (kg/year)
Wood logs	kg	100	150

**Liquid Fuels:**

Description	Units	Annual Usage	CO <sub>2</sub> e (kg/year)
Red diesel	Litres	190	681
Petrol	Litres	40	115
Lubricants	Litres	27	87

**Electricity:**

Description	Units	Renewable %	Annual Usage	CO <sub>2</sub> e (kg/year)
Renewable tariff	kWh	100	181	17
	kg	0		0

**Public Transport:**

Description	Units	Annual Travel	CO <sub>2</sub> e (kg/year)
Rail	Miles per year	800	72
Air (UK)	Miles per year	50	24
Taxi	Miles per year	5	2

▸ Materials

**Steel:**

Description	Units	Annual Usage	CO2e (kg/year)
General	kg	88	128

**Pine/Spruce:**

Description	Units	Annual Usage	CO2e (kg/year)
by volume (m3)	m3	1	284

**Glass:**

Description	Units	Annual Usage	CO2e (kg/year)
Glass by weight	kg	10	9

**Netting:**

Description	Units	Annual Usage	CO2e (kg/year)
Bird netting	m2	100	13

**Consumables:**

Description	Units	Annual Usage	CO2e (kg/year)
Bags (Polythene)	kg	27	69
Bags (Paper)	kg	8	12
Boxes (Cardboard)	kg	15	19
Silage sheet (LDPE film)	kg	15	39

**Paper:**

Description	Units	Annual Usage	CO2e (kg/year)
Paper	Reams	2	7

**Sewage:**

Description	Units	Annual usage	CO2e (kg/year)
			0

**Tyres:**

Description	Units	Annual Usage	CO2e (kg/year)
Farm Machinery	kg	16	46

▶ Capital Items

**Glasshouse:**

Description	Units	Annual Usage	CO2e (kg/year)
Timber	kg	1	0

**Polytunnel Cover:**

Description	Units	Annual Usage	CO2e (kg/year)
LDPE Film by weight	kg	60	17

**Polytunnel Frame (single span):**

Description	Units	Annual Usage	CO2e (kg/year)
Width 8.2m	Length (m)	25	72

**Concrete:**

Description	Units	Annual Usage	CO2e (kg/year)
General	t	1	11

**Storage Tanks:**

Description	Units	Annual Usage	CO2e (kg/year)
Steel (General)	kg	75	15
EDPM/butyl liner	kg	50	14

**Farm Machinery (self-propelled):**

Description	Units	Annual Usage	CO2e (kg/year)
Tractor	Horse power	35	1,540

► Fertility

### Horticultural Crops:

Description	Units	Annual Quantity	CO2e (kg/year)	N2Oe (kg/year)
Potatoes	tonnes	0	4	0
Other Vegetables	tonnes	1	10	0

### Grassland:

Description	Units	Quantity	CO2e (kg/year)
	Hectares		0

### Green Manures:

Description	Units	% Purity	Annual Quantity	CO2e (kg/year)	N2Oe (kg/year)
White clover	Hectares	100	0	91	0
Sweet Clover	Hectares	100	0	177	1

### Organic Fertilisers:

Description	Units	Annual Quantity	CO2e (kg/year)
Green Waste Compost	tonnes	3	354

### Plant-raising media:

Description	Units	Annual Quantity	CO2e (kg/year)	N2Oe (kg/year)
Vermiculite	Litres	100	7	0

## ▶ Livestock

### Dairy Cows:

Description	Head	Stored Slurry (%)	FYM (%)	In Field (%)	Daily Spread (%)	Milk Yield (litres per head per year)	CO2e (kg/year)
	0						0

### All other animals:

Description	Head	Stored Slurry (%)	FYM (%)	In Field (%)	Daily Spread (%)	Enteric CH4	Manure CH4	CO2e (kg/year)
	0							0

### Non-organic Feed (imported):

Description	Units	Annual quantity	CO2e (kg/year)
			0

## ▶ Waste



**Waste Items:**

Description	Units	Landfill	Recycling	CO2e from landfill (kg/year)	CO2e from recycling (kg/year)
General waste	tonnes	0		92	0
Batteries	tonnes		0	0	2
Scrap metal	tonnes		0	0	2
Electrical items	tonnes		0	0	0
Tyres	tonnes		0	0	0

**► Distribution****Produce Delivered:**

Produce Delivered	Delivery System	Vehicle Type	Delivery distance (mi)	Journeys per year	Weight carried per year (t)	CO2e (kg/year)
Veg by boat	Courier		4	120	1	0

**► Sequestration**

**Woodland:**

Description	Units	No. of units	CO2e (kg/year)
Woodland: short rotation coppice	hectares	1	12,528

**Hedgerows:**

Description	Units	Total Length (m)	Average Width (m)	CO2e (kg/year)
Hedgerows - large growth	metres	1,200	3	10,626

**Woodland (detailed analysis):**

Description	Average Age (years)	Area (hectares)	CO2e (kg/year)
Ash/mixed native woods	30	0	5,020

**Field Margins:**

Description	Units	Length	Average Width (m)	CO2e (kg/year)
Uncultivated	length (m)	280	2	111

**Soil Organic Matter:**

Part of Farm	Area (hectares)	Soil Bulk Density	SOM % Last yr	SOM % This yr	CO2e (kg/year)
Lawrences 1	0	Sand (1.6)	3.57	3.95	15,516
Lawrences 2	0	Sand (1.6)	2.55	2.81	9,289
Lawrences 3	0	Sand (1.6)	2.65	2.85	9,187
Lawrences 4	0	Sand (1.6)	2.96	3.01	2,042

**Orchards:**

Description	Units	No. of units	CO2e (kg/year)
Top Fruit	hectares	0	231

**Vineyard:**

Description	Units	No. of units	CO2e (kg/year)
Grape vines	hectares	0	9