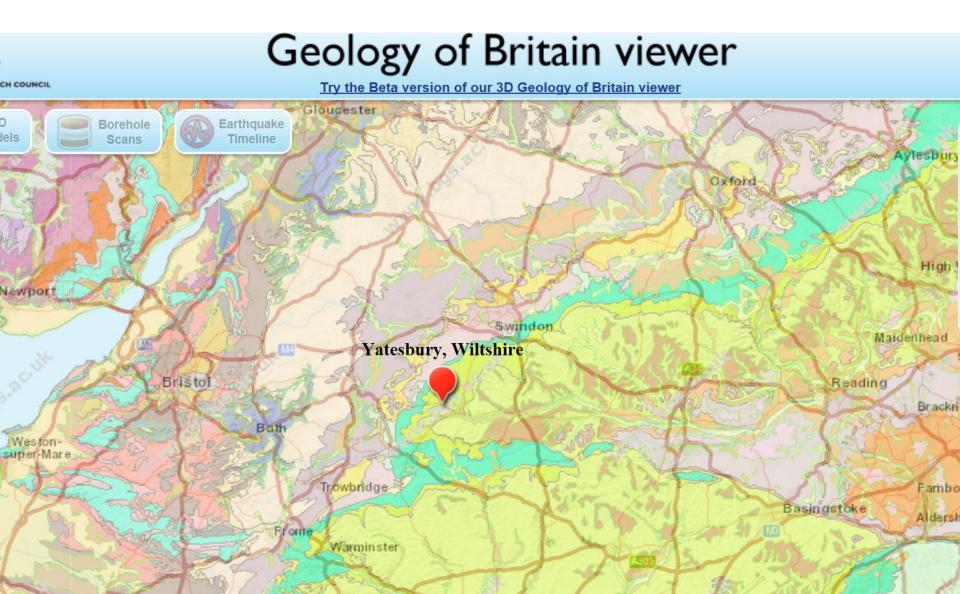


#### Every 2 minutes

#### there is a same amount of energy arriving from the Sun

#### as mankind takes a year to produce





Our Geology and soil type:



Silty clay loam, over lower grey chalk 20cm to +70cm depth to chalk Rain fall: 680mm – 810mm p.a.

# Here it is in good shape.

There is plenty of opportunity for slumping or baking solid of wet soils.





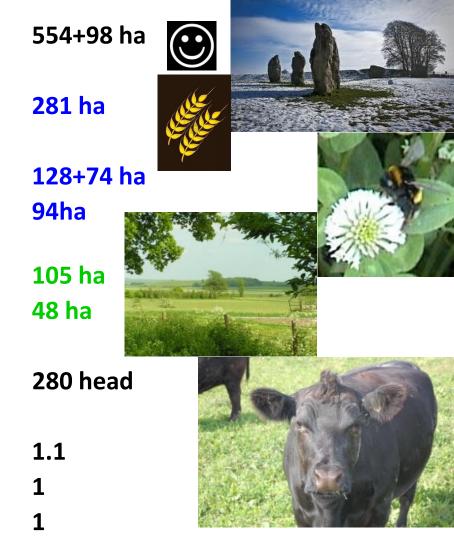
**Started Organic Conversion 1998** 

**Mostly Cereals** 

Diverse leys Environmental Stewardship

Pasture permanent Woodland

Aberdeen Angus Pedigree Suckler Herd Richard Charlotte Angus Zac Bea Permenant Staff Graduate trainee Summer Student



Silvopastoral Agroforestry



# 

Shelter from Sun for cattle Shelter from rain for cattle Itching posts Dynamic change for biodiversity Opens up the space for light Allows sowing of wild flowers Coppice to regenerate Increase carbon storage Bring into the farm organism



#### **Plastic collection**





#### Willow planting





#### Aim 1-2000 tree plants per year



#### **Biodiversity**

"so many more bugs here than other farms I go to" "the hares are the size of foxes here" The Agreed Works to be carried out by the Trust comprise:

- (1) Supply 2025 shrubs and trees, 325 spirals and canes, 1700 guards and stakes, 425 mulch mats and pegs by the end of March 2017.
- (2) The tree species are to be in the following approximate numbers:

Alder	125	Crab Apple	75
Field Maple	250	Hazel	125
Hornbeam	475	Lime (Small Leaf)	200
Oak (Common)	475	Walnut	100
Whitebeam	100	Wild Cherry	100

The Plan



The PUR Project





Silvoarable, Agroforestry

PUR Woodland Trust Grant 2019

Planting apples in 30m curved rows

**Usual rotation between** 









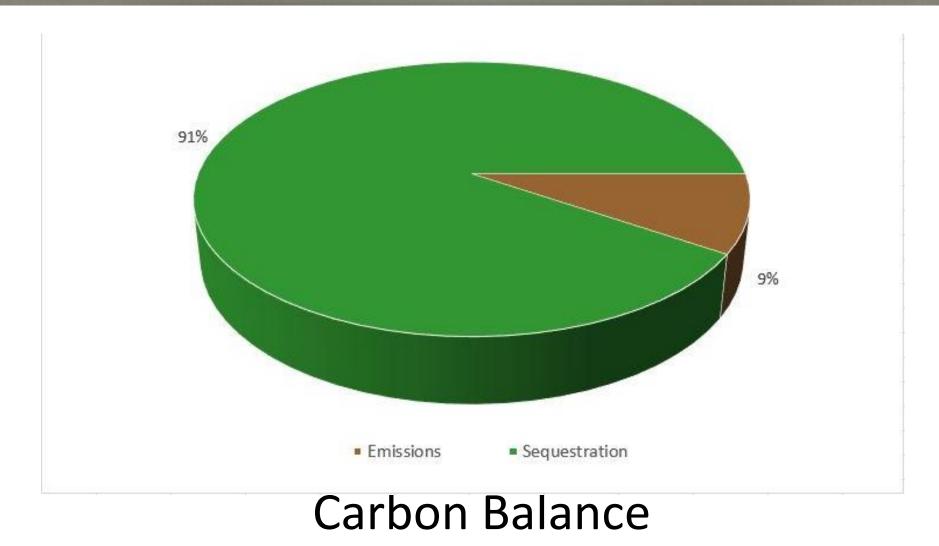
#### Health



#### Health and Impact



#### Farm Carbon Cutting Toolkit





#### Emissions

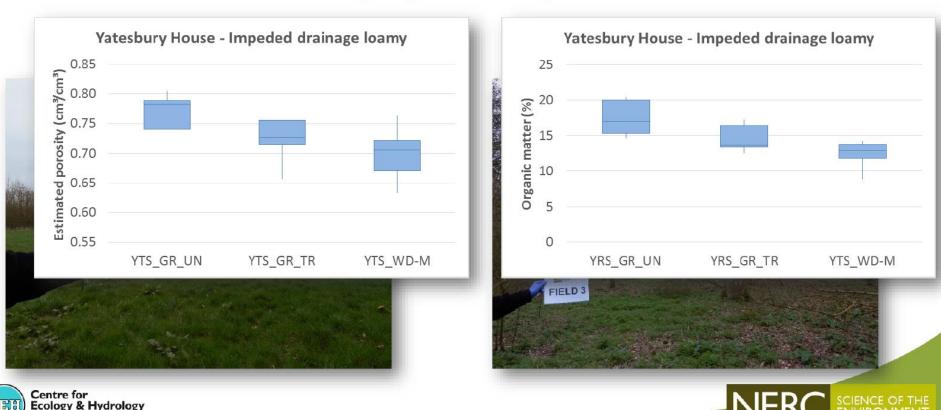
	C02e (kg/year)	% total emissions
Fuel	97,581	9.76%
Materials	4,815	0.48%
Capital Items	31,988	3.20%
Livestock	727,836	72.76%
Fertility	136,360	13.63%
Agro-chemicals	0	0.00%
Distribution	1,557	0.16%
Waste	130	0.01%
Total:	1,000,267	100%

### Sequestration

	C0 <sub>2</sub> (kg/year)	% total sequestration
Field Margins	11,892	0.12%
Soil Organic Matter	9,512,729	96.46%
Orchards & Vineyard	0	0.00%
Wetland	0	0.00%
Woodland & Hedges	337,284	3.42%
Woodland (detailed analysis)	0	0.00%
Total	9,861,905	100.00%

#### Methane is it worth it -Grassland untrafficked-Grassland trafficked -Woodland

Broad-scale field survey – preliminary results









# We need cows to save the planet