



Making trees work for livestock

Oxford 2020

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Nostalgia



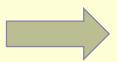






Timeline

- 1950 Longnor tenant
 - 80 cows 400 chickens10 pigs
- 1973 acquired farm
- 1984 clover trials
 - 100 cows 250 sheep 80 beef
- 1998 organic conversion
- 2000 sold organic milk



- 2005 red house farm
 - 180 cows 0 sheep100 beef
- 2016 WebscottFarm
 - 450 cows 220 beef 0 sheep

2018

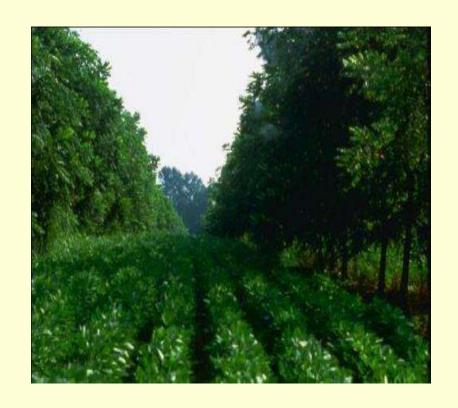
- 250 cows Longnor
- 220 cows Webscott
- 250 beef Waitrose
- Grass based
- 12 Staff full and part time





Aims

- To research the role of browsing trees for health
- Value of different species for moisture retention
- Fuel and alternative uses
- Planting the lost generation



Research







Positioning





Willows crack and white



$C_7H_6O_3$

- Willow contains salicin, body converts into salicylic acid
- Pain reliever
- Anti-inflammatory
- Headache pain
- Muscle cramps
- Menstrual pain
- Osteoarthritis symptoms
- Back pain

- Crack willow (salix fragilis)
- White willow (salix alba)
- Higher potency in the spring
- Willow acts more slowly than aspirin as a pain reliever, but effect last longer



Agroforestry willow



Cow with collar browsing





The Weird and Wonderful



School owl visit

The importance of in field trees



Hedge laying

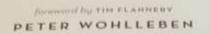
Pleaching with a billhook of brumuck.



Notes

- The tree has to have secret reserves to fight off pests Pytonicides have antibiotic properties. A biologist from Leningrad in 1956 put a pinch of crushed spruce needles in glass with protozoa all dead in seconds
- Walnuts have compounds in leaves that deal effectively with insects

- Trees release 29tonnes of Oxygen into air per square mile of forest, the daily requirement for 10,000 people
- Approximately 15 trees store 1 tonne of Carbon per year. 1C = 3.67 CO₂ equivalents



The Hidden Life of TREES



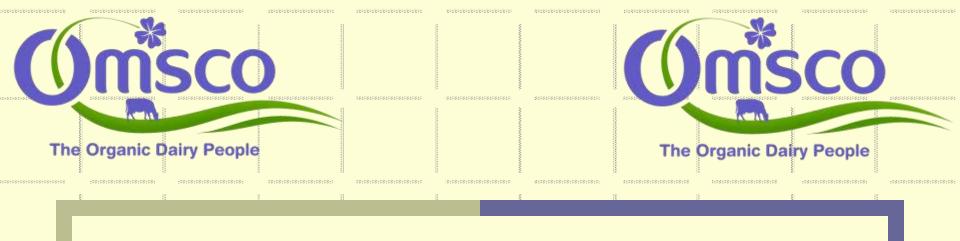
What They Feel, How They Communicate

Discoveries from a Secret World

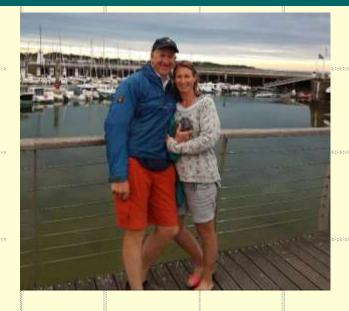
Awards







Thanks



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