How Grazing Cattle Can Save The World

ROB HAVARD — ECOLOGIST AND FARMER PHEPSON FARM, WORCESTERSHIRE

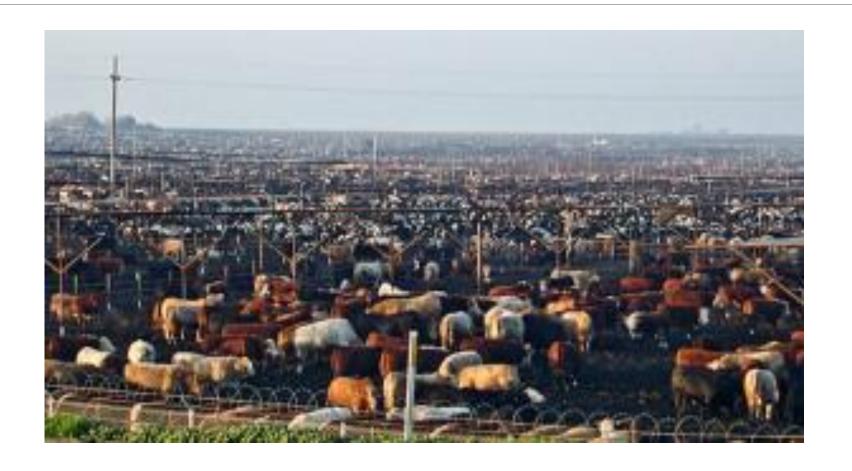
Me

- Partner in the family livestock farm
- Worked for 15 years in Ecology and Wildlife Conservation
- Specialising in Grassland Conservation and Conservation Grazing
- Rare Breed conservation

What do we know about cattle and the environment?



What is this?



How do you view cattle?



<u>SCOPE (Society for Conservation and Protection of Environment)</u> estimates that desertification is happening in about 70% of all drylands, which equals to one quarter of the land area of the Earth.











All of these habitats require a group of keystone species to maintain them







Grasslands are Special and large herbivores are part of this ecosystem

Can this really be that bad?

In 1805, while leading the Corps of Discovery through the northern Great Plains, Meriwether Lewis recorded:

"the country in every direction around us was one vast plain in which innumerable herds of Buffalo were seen attended by their shepherds, the wolves; the solitary antelope which now had their young were distributed over its face; some herds of elk were also seen."



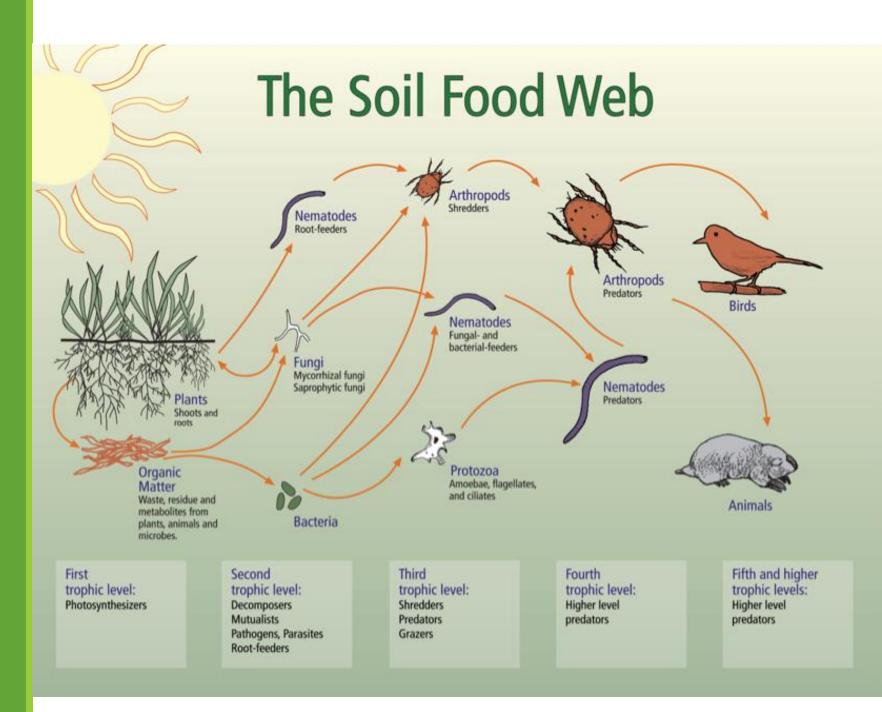




Trampled grass

Have you heard of Methanotrophs?

It is not the dead grass but the organisms underneath it that build soil.



Rest Periods

Andre Voisin – Grass Productivity - 1959

First law of rational grazing -

"Before a sward, sheared with the animal's teeth, can achieve its maximum productivity, sufficient interval must have elapsed between two successive shearings to allow the grass to accumulate in its roots the reserves necessary for a vigourous spurt of re-growth."

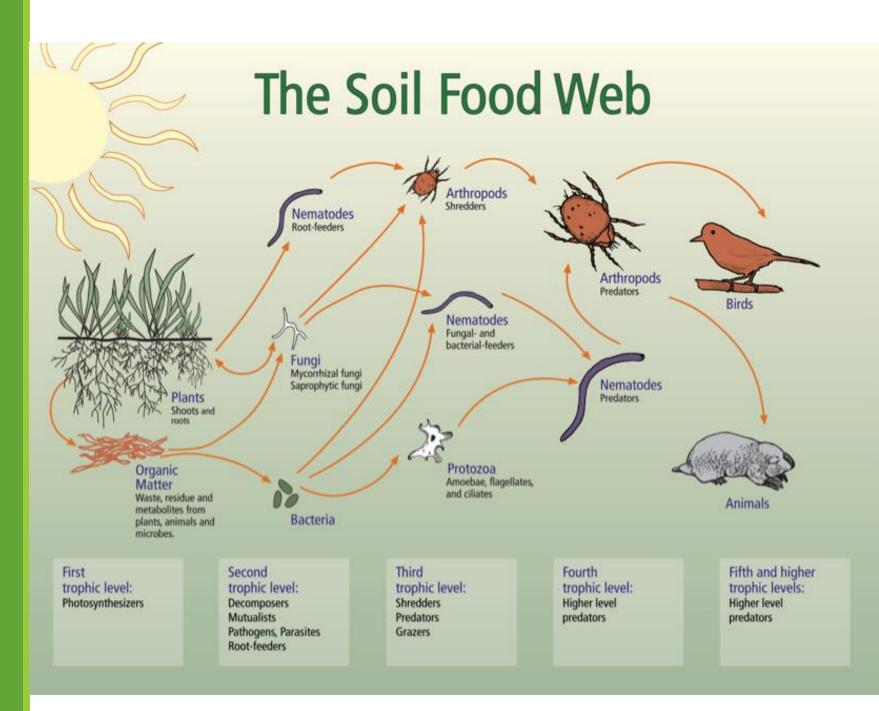
- Rest periods.



Root Exudates

Healthy Soil = Lots of life = Lots of Carbon

The Kg of organisms in the soil is greater than the Kg of cattle walking on it.





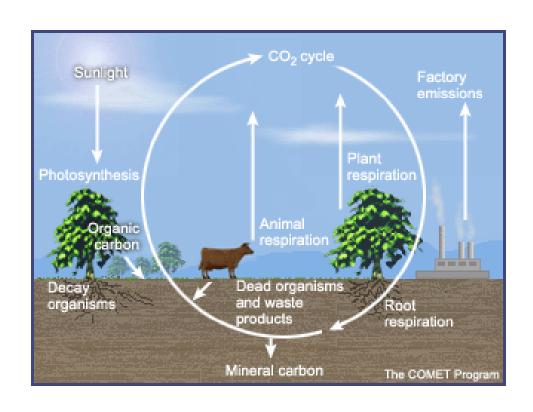
Restoration potential

Restoration





The Carbon Cycle





Can

THIS

REPLACE THIS





What is the Potential?

- Farmers seeing an increase of 10 cm of topsoil in 1 year
 - 1mm of soil = 10 tonnes/ha
- •At an average of 1% organic matter there is 0.58 tonnes Carbon/ha/cm
- Many arable farmers moving from 1% to 6-7% SOM
- I now have soil in Permanent pasture at over 15% SOM
- •There are 5 billion hectares of Grassland on the planet!
- •Abundance/Profit!! £££££ ©©©©©

We've been given the gift of abundance

If we look at the perfection of creation we would also see that we've been given a pretty good instruction manual too.



Rejoice in the Lord always. I will say it again: Rejoice!

Let your gentleness be evident to all. The Lord is near.

Do not be anxious about anything, but in every situation, by prayer and petition, with thanksgiving, present your requests to God.

And the peace of God, which transcends all understanding, will guard your hearts and your minds in Christ Jesus.

Finally, brothers and sisters, whatever is true, whatever is noble, whatever is right, whatever is pure, whatever is lovely, whatever is admirable—if anything is excellent or praiseworthy—think about these things.

Whatever you have learned or received or heard from me, or seen in me—put it into practice. And the God of peace will be with you.

Phillipians 4, 4-8

Thank You for listening

Rob Havard
Phepson Farm
Worcestershire

