

# ***Knepp's Regenerative Farm Tour***

**Led by Russ Carrington**  
***@KneppRegenFarms***









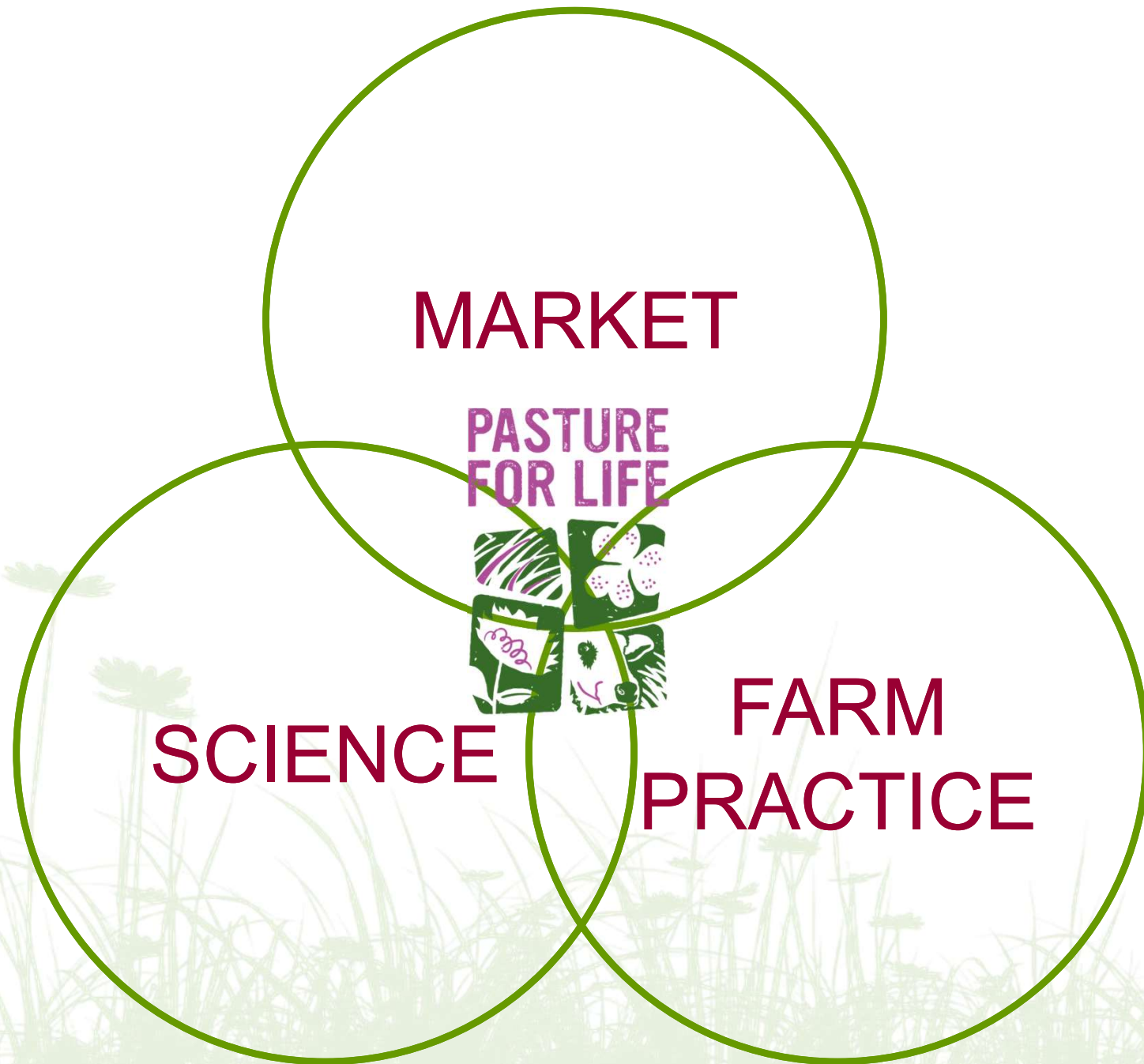


# PASTURE FOR LIFE

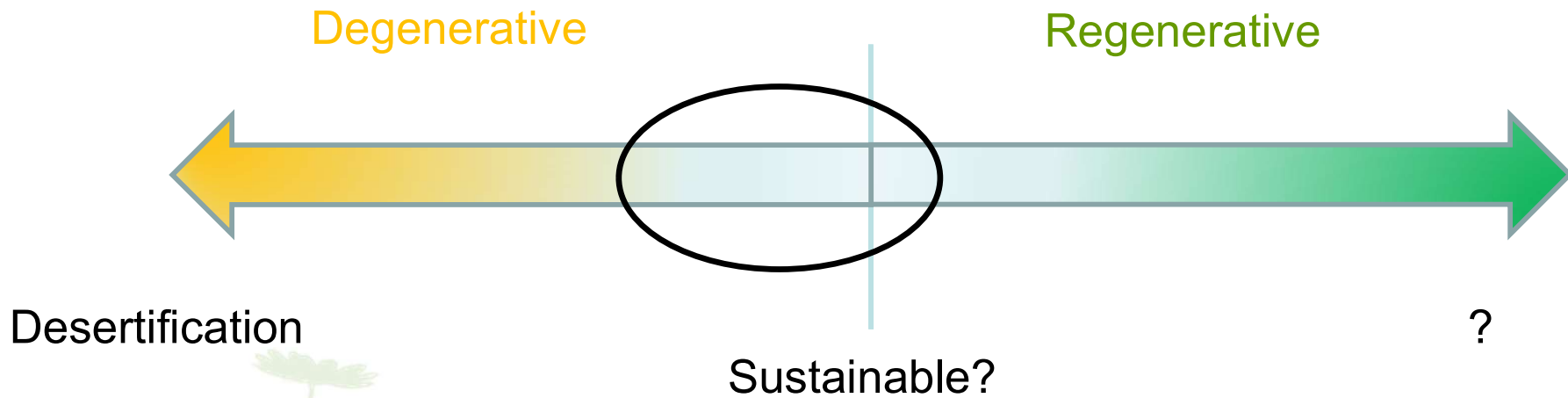


*The UK's only Certification Mark for 100%  
grass-fed livestock – owned and managed  
by the Pasture-Fed Livestock Association*





# What is regenerative agriculture?



Time farming



Time farming



Time farming

# Principles of regenerative agriculture

1. Keep the soil **surface covered** as much as possible
2. Try to **limit** the amount of physical and chemical **disturbance** of the soil as much as possible
3. A wide **diversity** of plants is encouraged to increase soil biodiversity
4. Keep **living roots** in the soil for as much of the year as possible
5. Integrate grazing **livestock** into the system





### THE COW'S CARBON CYCLE

ALL THE CARBON IN THE COW, BREATHED AND BELCHED, CAME FROM THE AIR & CYCLED THROUGH THE GRASS THAT THE COW ATE.

CO<sub>2</sub> PLANT RESPIRATION

CO<sub>2</sub> (100%) PHOTOSYNTHESIS

CH<sub>4</sub> (11%) CARBON BELCHED

CO<sub>2</sub> BEATHED OUT

CARBON IN AIR  
CO<sub>2</sub>  
CH<sub>4</sub> → CO<sub>2</sub>

CO<sub>2</sub> BREATHED OUT

CARBON IN HUMAN

CARBON IN MEAT AND MILK

CARBON IN POOP

CARBON IN COW

EATEN BY COW

CARBON IN GRASS  
CARBON IN ROOTS

LIQUID CARBON IN EXUDATES FEEDS SOIL MICROBES

NEW SOIL IS BUILT THROUGH SOIL MICROBIAL LIFE-CYCLES, ROOT BIOMASS, COW POOP & PLANT LITTER TRODDEN IN BY COWS

UP TO 40%

### CARBON SEQUESTRATION

TRIGGERED BY GRAZING COWS, CARBON IS TAKEN FROM THE AIR BY PLANTS & PUMPED INTO THE SOIL, PROVIDING ENERGY FOR SOIL MICROBES TO BUILD HUMUS & STORE CARBON

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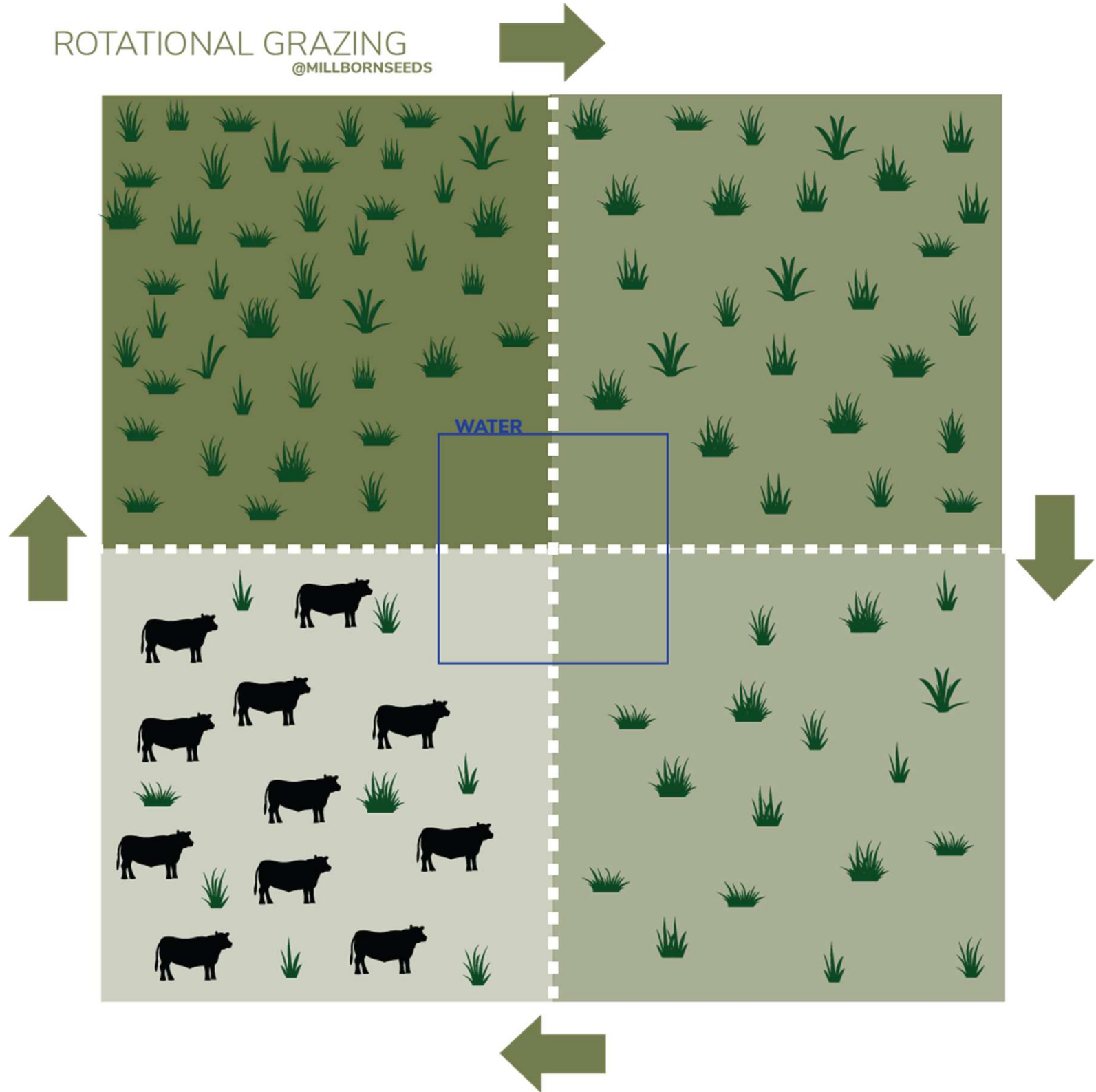






# ROTATIONAL GRAZING

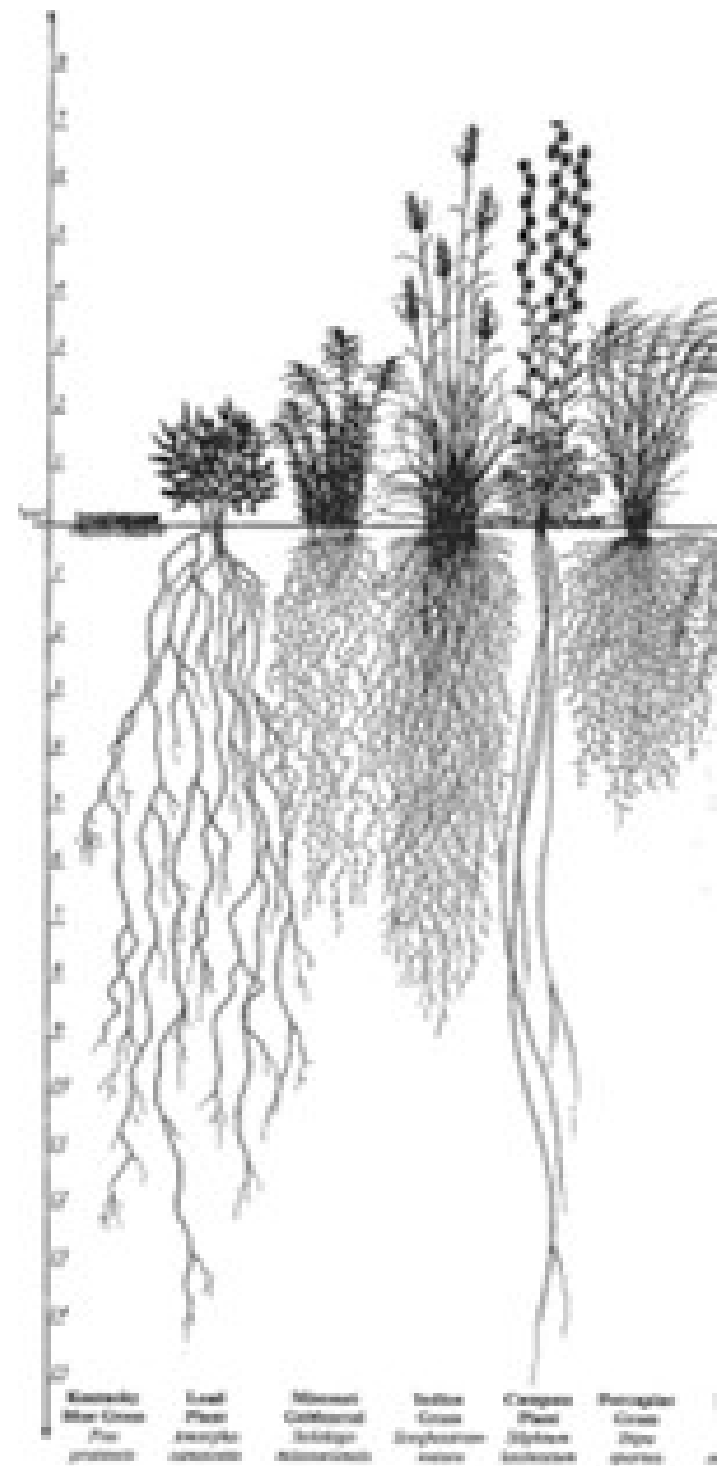
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# Regenerative farming at Knepp



# Regenerative agriculture at Knepp

- Explore nature recovery on a landscape scale by connecting neighbouring land with areas of rewilding
- Understand the ability of regenerative agriculture to build natural capital and see how nature responds
- Supply healthy nutritious food to local communities and visitors

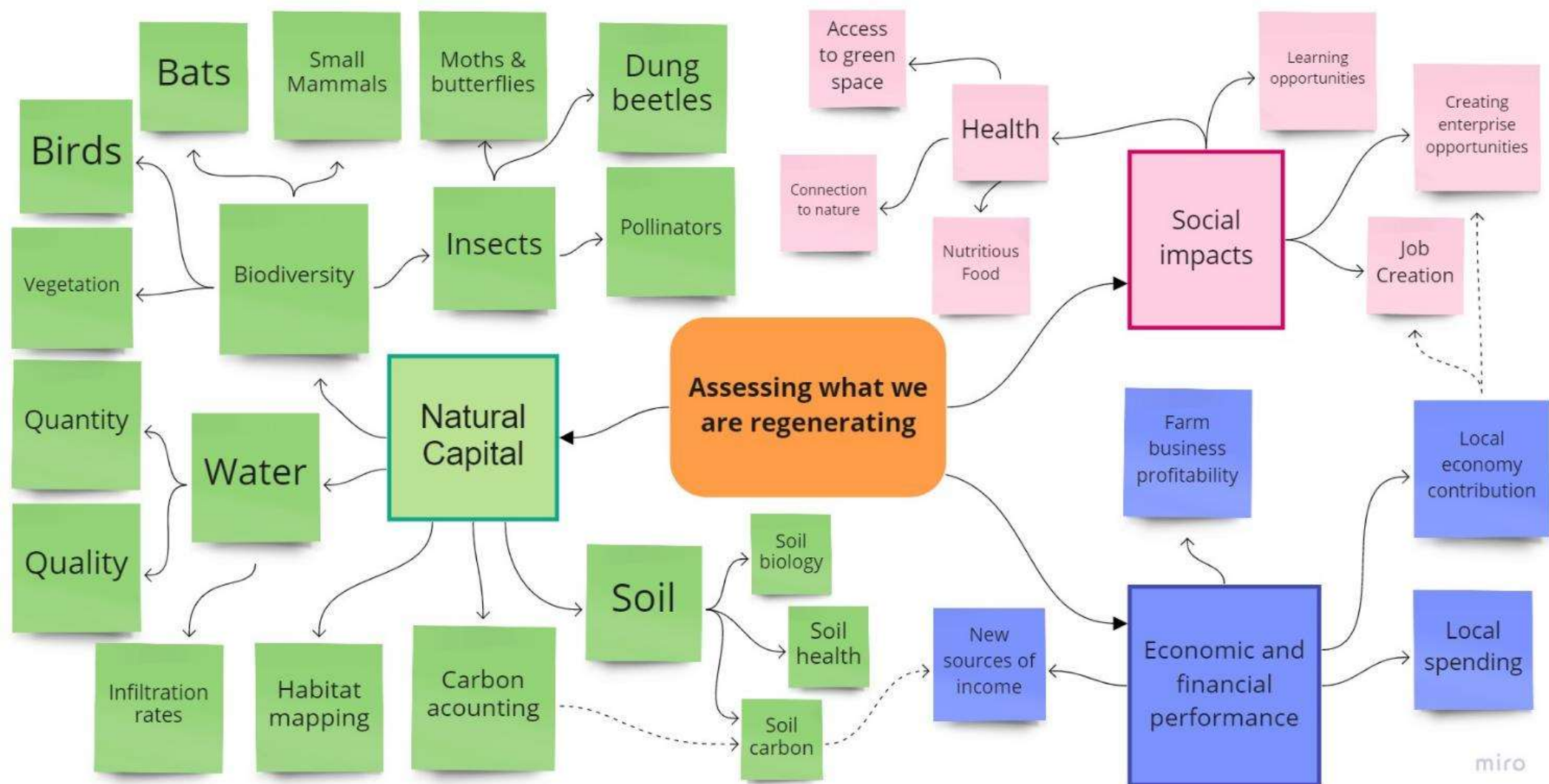










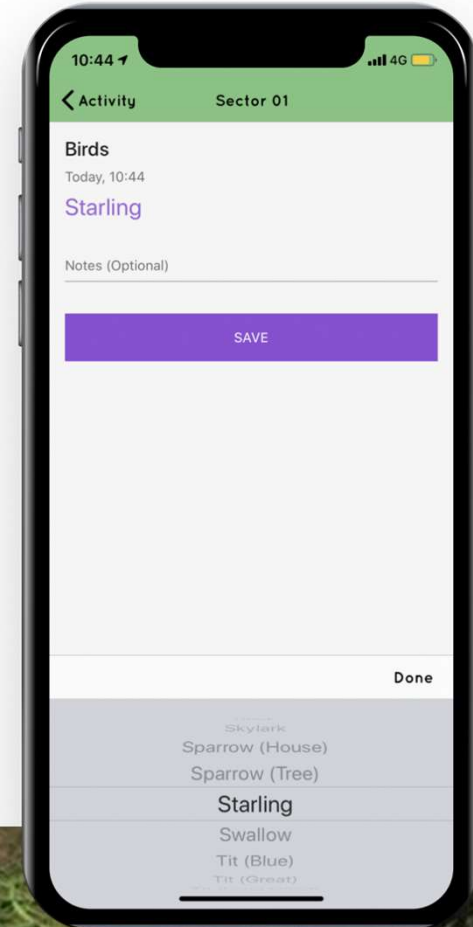
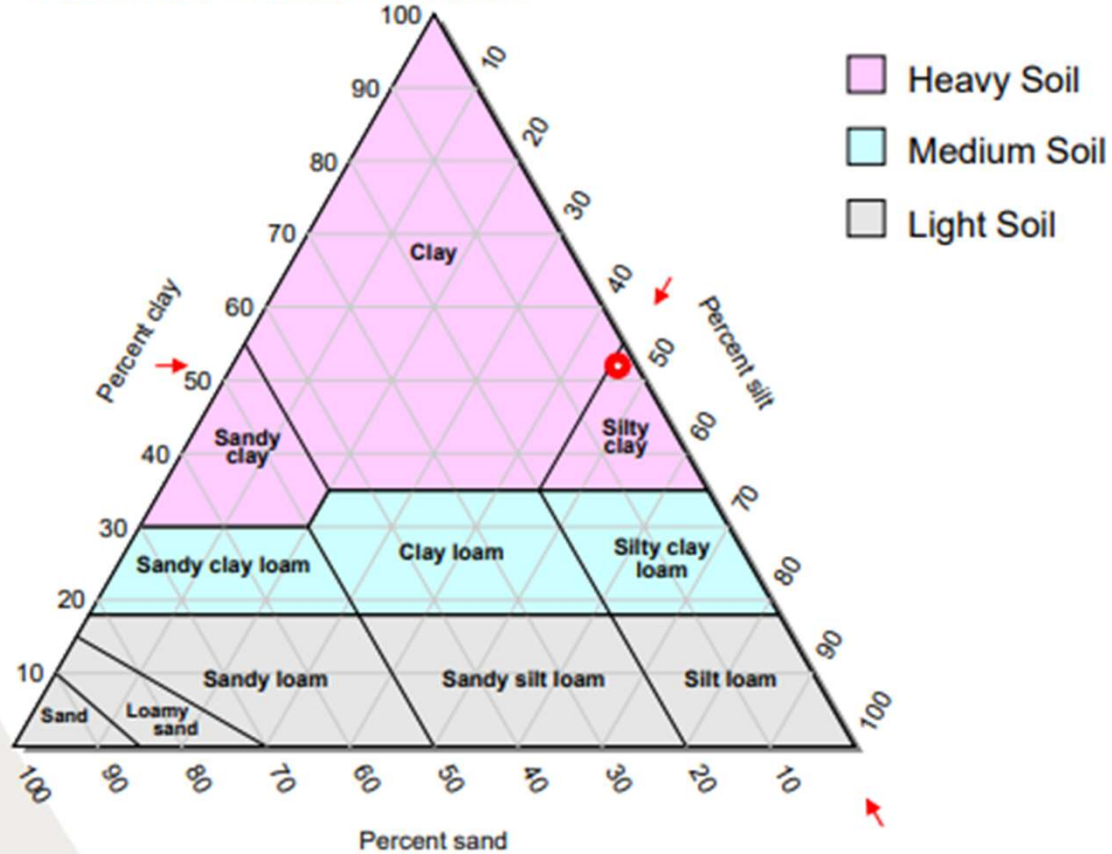








## Textural Classification



**Soil Organic  
Matter (LOI)  
= 4.4 – 7.5%**











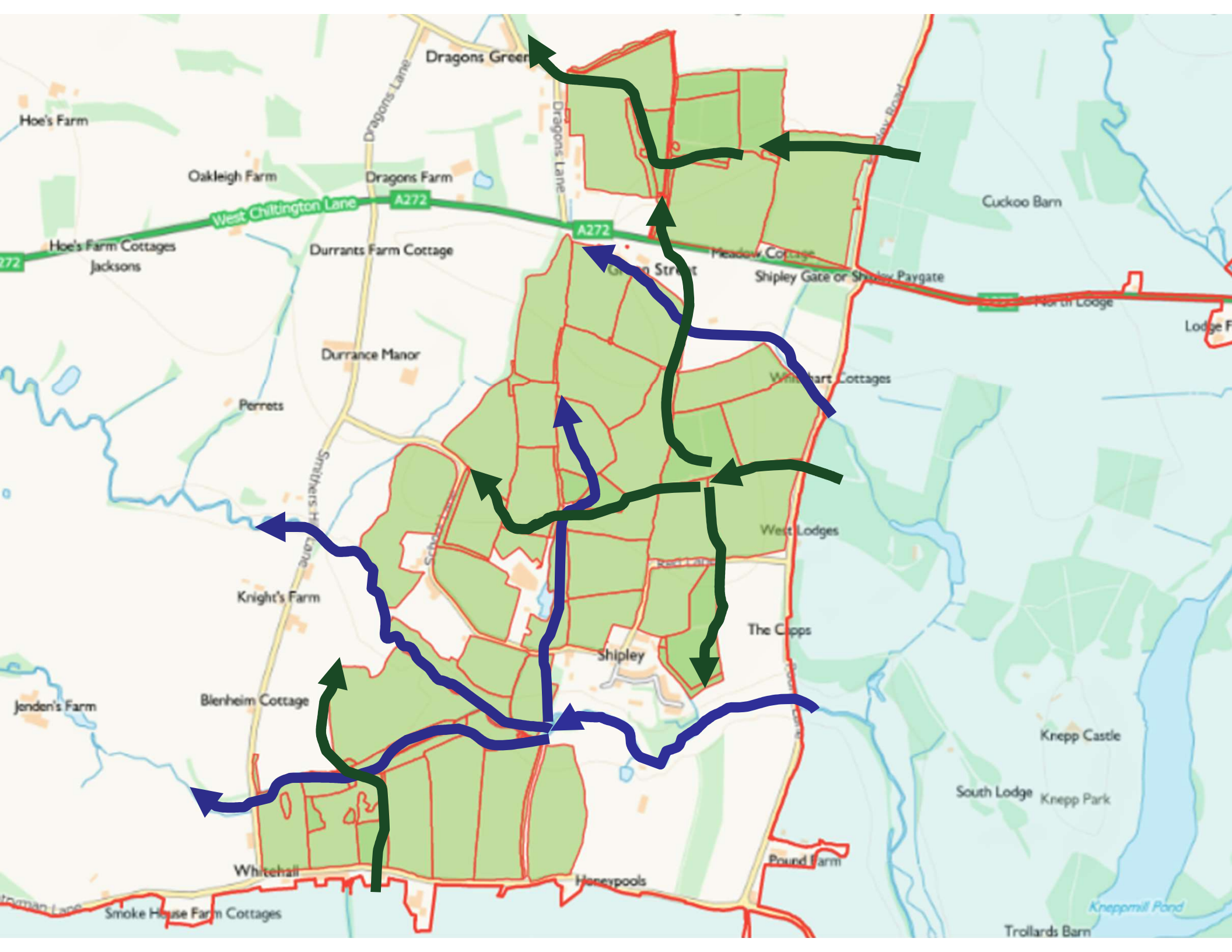




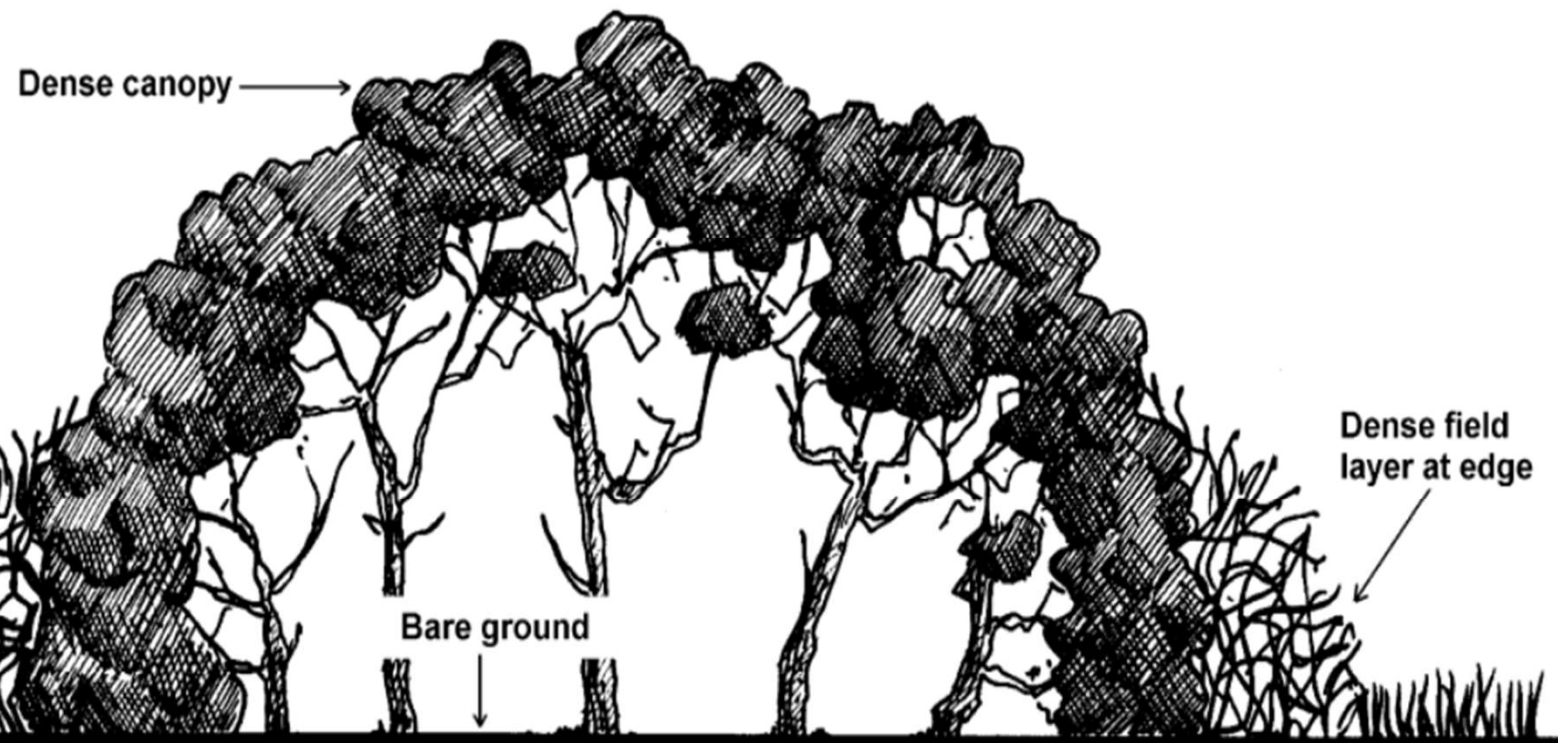














# ***Thank you***



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