# Pasture Diversity

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#### Pasture Diversity – Discussion Points

- Soil pH
- Fertility
- Production
- Grazing Management
- Species
- Rooting Depth
- Animal Health
- Pasture Resilience

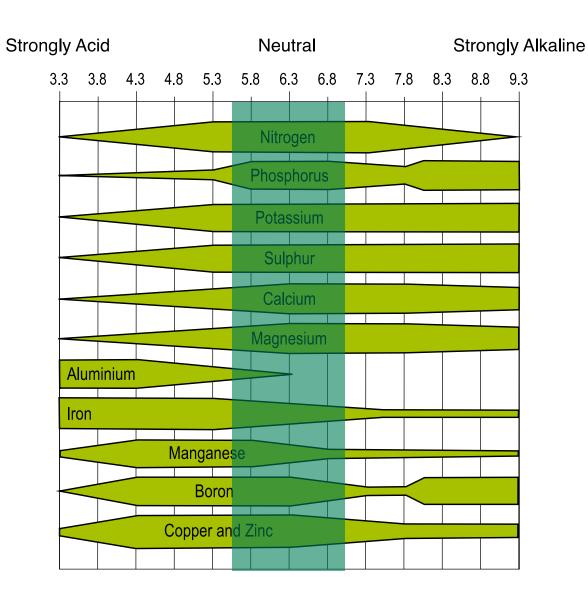
## More importantly

What do you want to know?

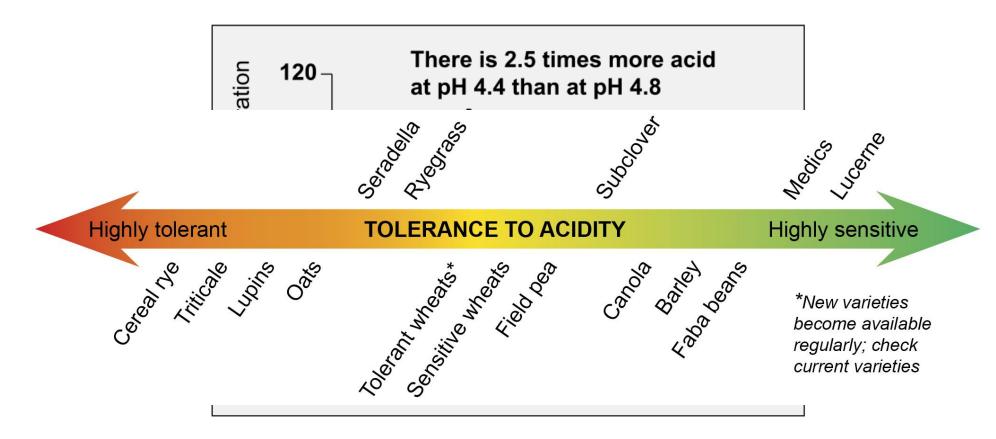
#### Soil pH

- Elemental foundation of production
- Enhances environment for soil health to thrive
- Increases availability of nutrient elements in the soil
- Reduces toxic elements in the soil (eg Aluminium)







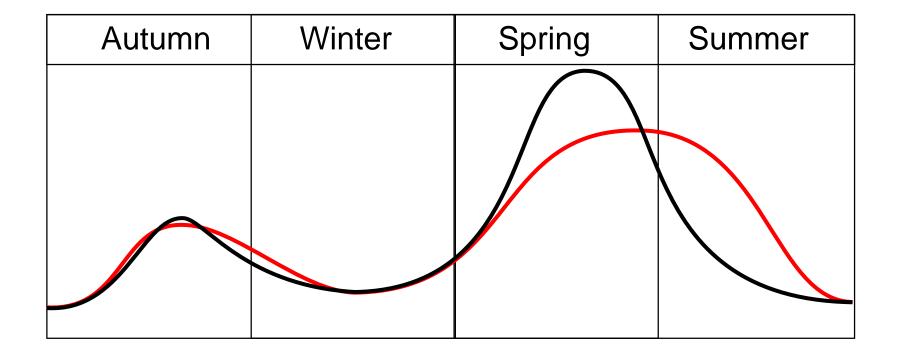


#### Fertility

- Legumes, naturally fix nitrogen (where stubble retained)
- Deep rooted species
  - recycle nutrients from depth on duplex soils
  - capture leached nutrients on free draining top soils
- Elements Phosphorus promotes legumes
  - Potassium also promotes legumes
  - Nitrogen promotes grasses and broadleafs

#### Pasture Production

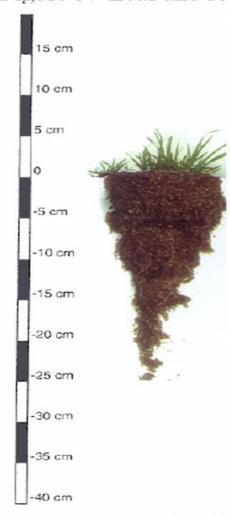
• Extend the season



#### Grazing Management

- Rest & Recover
- Smaller Paddocks
- Higher Stocking Intensity
- Shorter Grazing Periods
- Longer Recovery Periods
- Understand Feed On Offer (FOO)
- Know animal requirements

Figure 5: Leaf and root development in ryegrass cut at 1, 2 and 3 leaves.



One Leaf

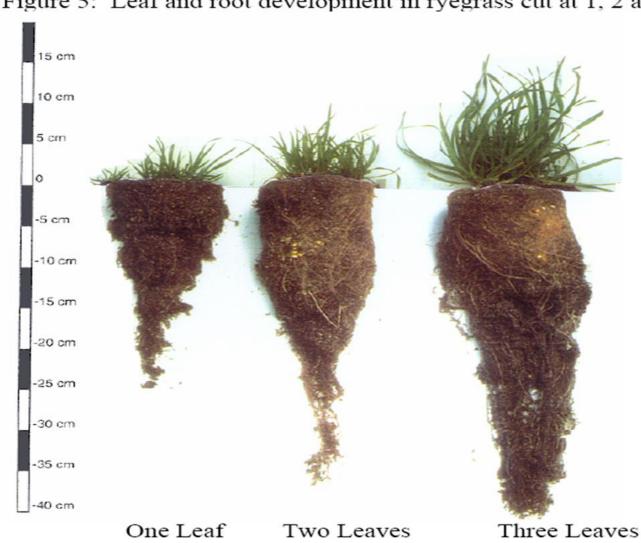
Figure 5: Leaf and root development in ryegrass cut at 1, 2 and 3 leaves.



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#### Grazing Management

Recovery of Native Species

## Species

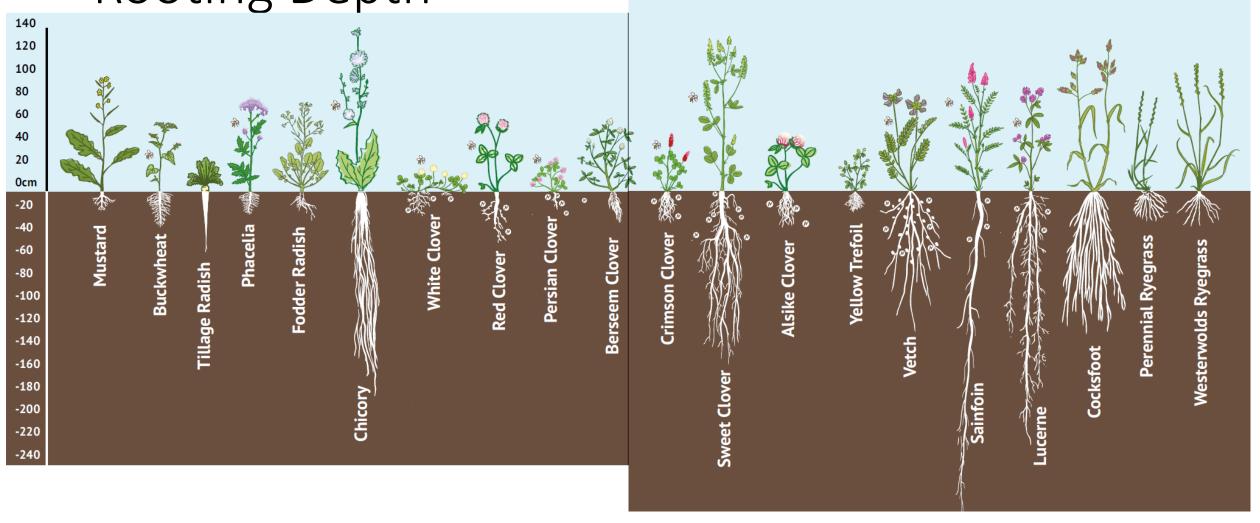
Grass

• Legume

• Herbs

Annual / Perennial

Rooting Depth



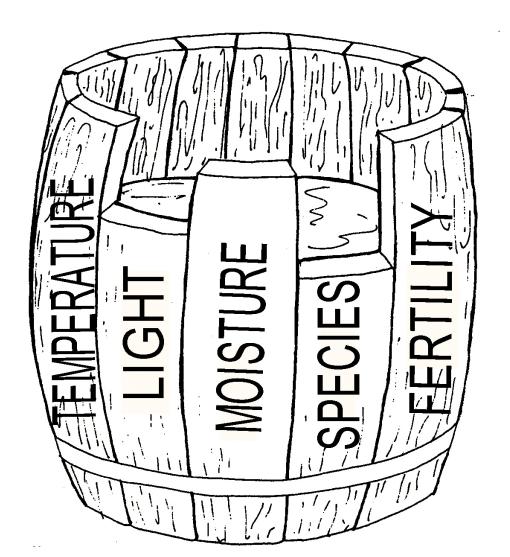
#### Animal Health

- Mineral density
- Anthelmintic properties
- Natural Insecticides

#### Pasture Resilience

- Drought tolerance
- Resource access
  - moisture
  - nutrients
- Species tolerance to adverse conditions
  - Salinity
  - Acidity
  - Compaction
  - Fertility

## What limits your production?



#### Reading

- <a href="http://www.grazeonline.com/doespasturediversitymatter">http://www.grazeonline.com/doespasturediversitymatter</a>
- <a href="https://www.stuff.co.nz/business/farming/101559947/pasture-diversity-is-a-winner-over-monocultures">https://www.stuff.co.nz/business/farming/101559947/pasture-diversity-is-a-winner-over-monocultures</a>
- https://www.wool.com/globalassets/start/on-farm-research-anddevelopment/production-systemseco/environment/biodiversity/lww veg productive-native-pastures-in-thehigh-medium-rainfall-zones1.pdf
- https://www.youtube.com/watch?v=AqNEwMicavw
- https://www.csiro.au/~/media/LWF/Files/Ecosystems-biodiversity/Guideto-grazing-as-a-tool-for-biodiversityconservation.pdf?la=en&hash=3A3B3571409B1B7438BD20D9549E561738 ACA37D