

NSW Grassland Society

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THE GRASSLAND SOCIETY OF NSW INC.

Key Observations



- Traditionally, most soils are measured to 10cm yet most pastures grow well beyond 10cm
- Economic circumstances have driven change in the last 5-10 years
- We have great soils but don't maximise their potential
- Soil structure does not show in a conventional soil test



Soils are the Key



- In tough times we stop developing our soils and pastures
- Without healthy soils, future performance will always be limited
- Other successful enterprises are concentrating on soil management



Productivity Map



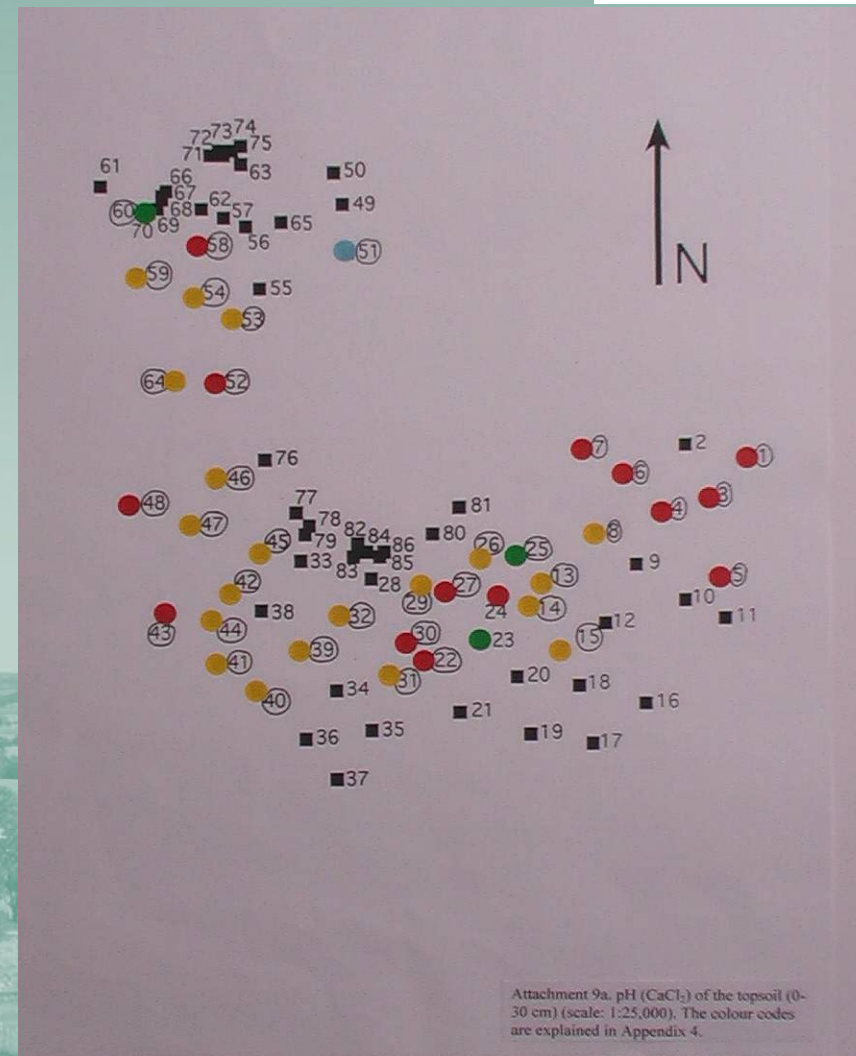
- Identify areas of varying production
- Serves as yield map
- Much cheaper than infra-red scans



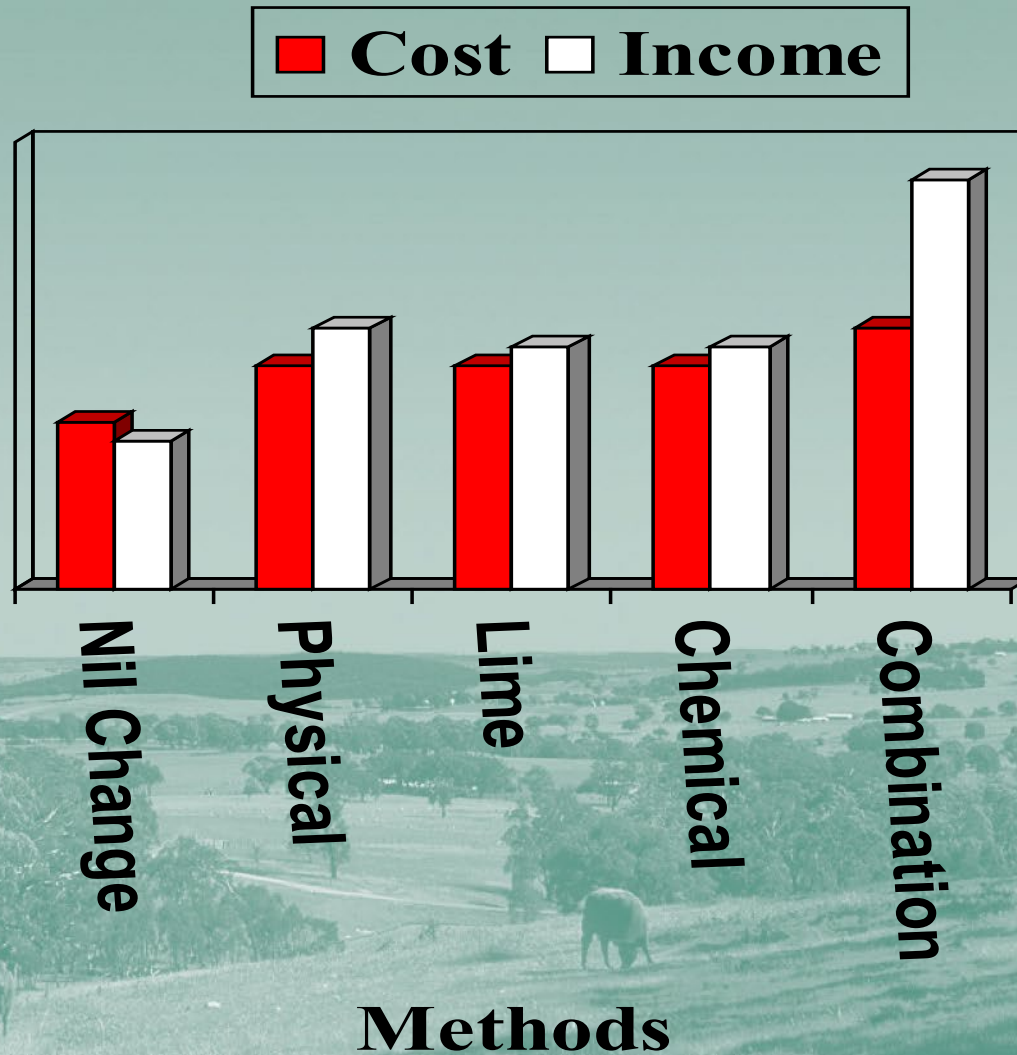
Using Soil Factor Maps



- pH
- Compaction Severity
- Ability of the soil to recover from compaction by shrink swell processes



Cost Benefit Ratios



The real cost of failed pastures



Sowing an improved pasture in soils that can not support the plant species is a very costly mistake.

- A paddock of 25ha with a failed pasture can cost up to \$18,000 over the first two years and still requires a new pasture mix to be sown



Mapping Profitability

- Create profitability maps that take into account current and potential pasture productivity
- Use this map to identify areas that can be taken out of production and used as environmental areas
- Concentrate efforts on soils that will give the largest improvement per dollar spent



Intensive versus Extensive

- Make soil suit improved pasture versus choose native pastures to suit soil.
- Return on capital invested (RCI)



Soils Program



- Individual Paddock plans designed
- There is little benefit further improving soils with good pasture growth.
- The greatest gains have been made by improving the low production paddocks on Stirling.



Stock Benefits



- Increased carrying capacity
- Production increased as
- Fertility 40%
- Wool cut 15%
- Tensile strength 25%
- Weight gain 30%
- Worm resistance 50%



Business Benefits

- Increased Wool Cut
- Higher value per Kg wool
- Improved Conception rate
- More lambs and calves
- Improved weight gains
- Higher value per Kg carcass
- More money on the bottom line



In Summary



- Working with knowledge of the entire soil profile means that the most limiting factor is dealt with – physical and chemical.
- Money is spent where it will have most impact
- Animal production and health have both improved
- From an underutilized farm to a progressive business .

