



Management of High Country Pastures

Meredith Mitchell

John Commins

Keren Walker

Fiona Baker

Wayne Burton

Martin Potts

Caroline Love







Research



Extension



Landholders



TopSoils

Two demonstration sites at Connors Hill and Reedy Flat, were set up to investigate the effect of nutrient application and strategic grazing in native pasture systems, focusing on production, weed control and ground cover.

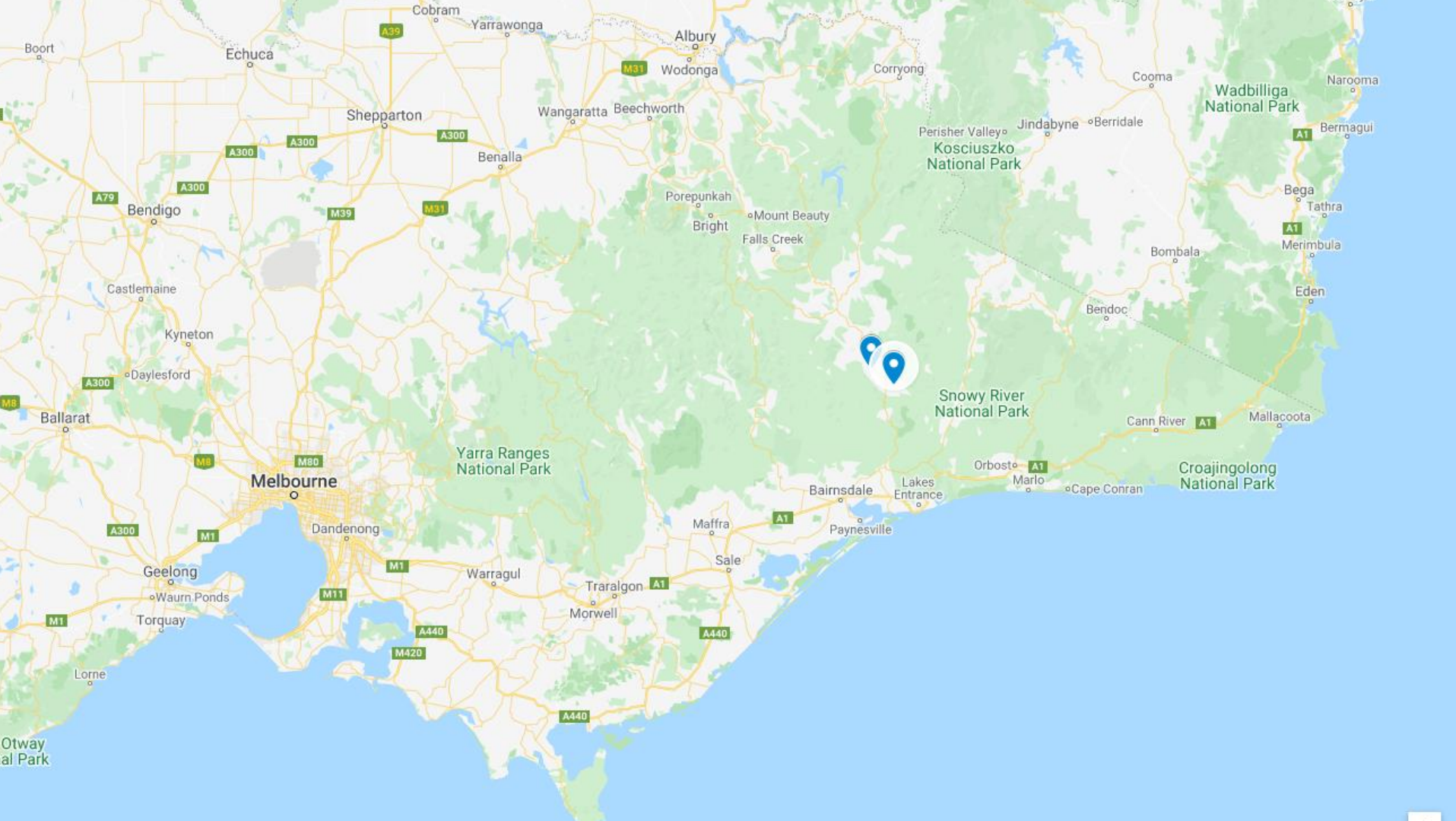
These sites have been monitored from spring 2016 to summer 2021.



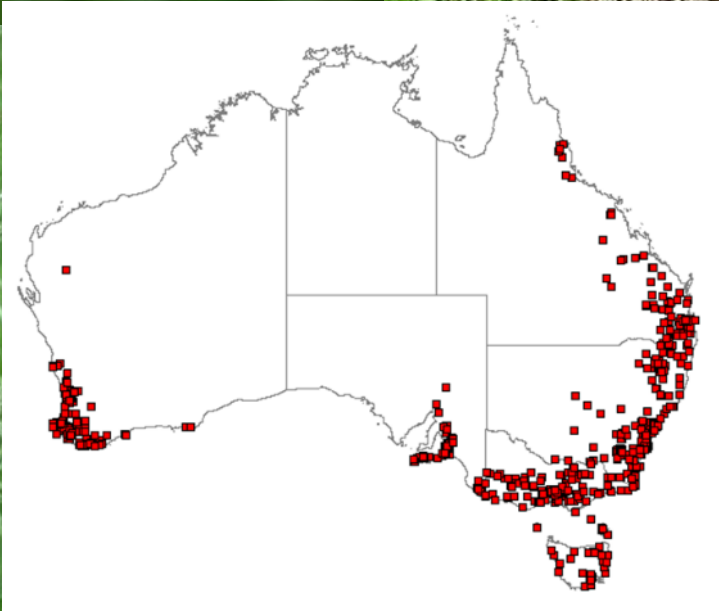
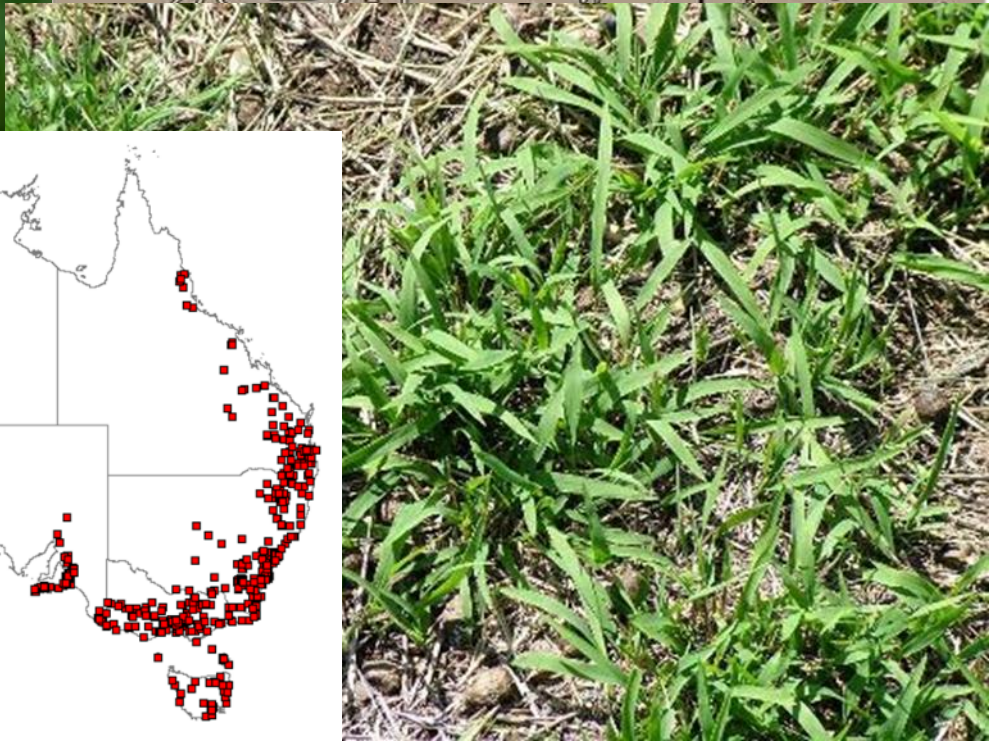
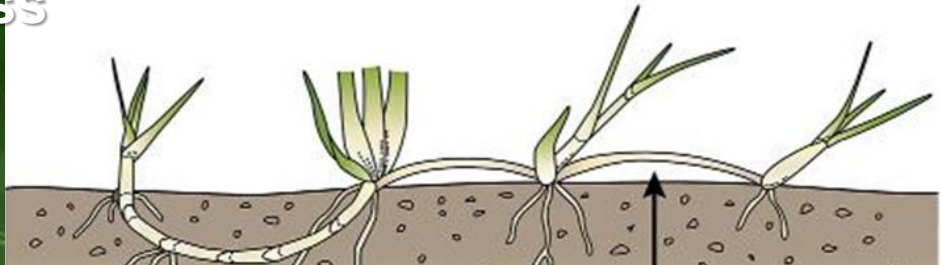
Measurements

- Established two areas:
 - Control – farmer management
 - Treatment - grazing management and fertiliser application
- Measurements:
 - Ground cover
 - Perennial grass persistence
 - Pasture composition
 - Soil fertility
 - Pasture quality



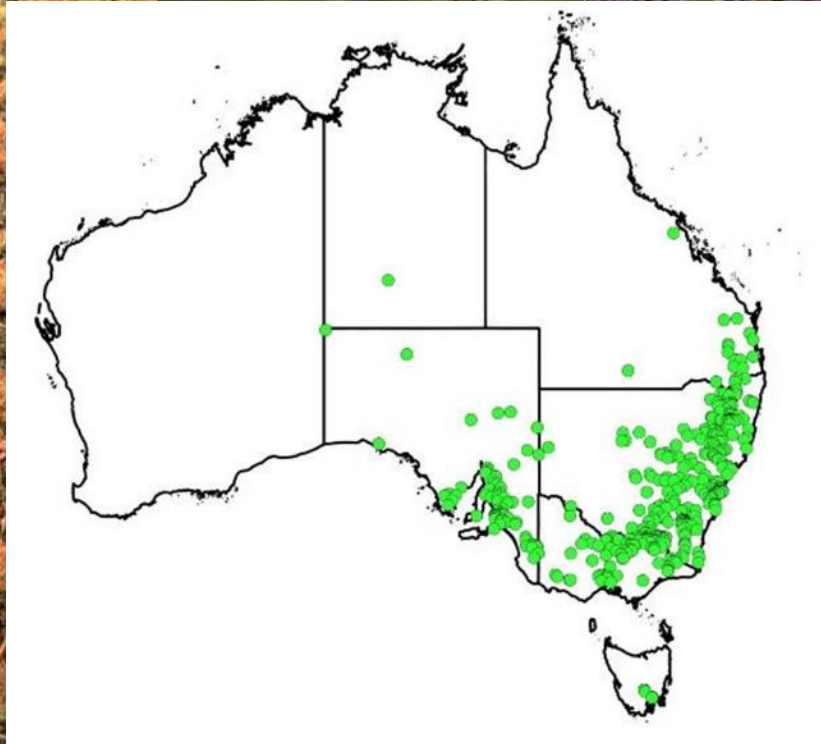


Microlaena stipoides – weeping grass



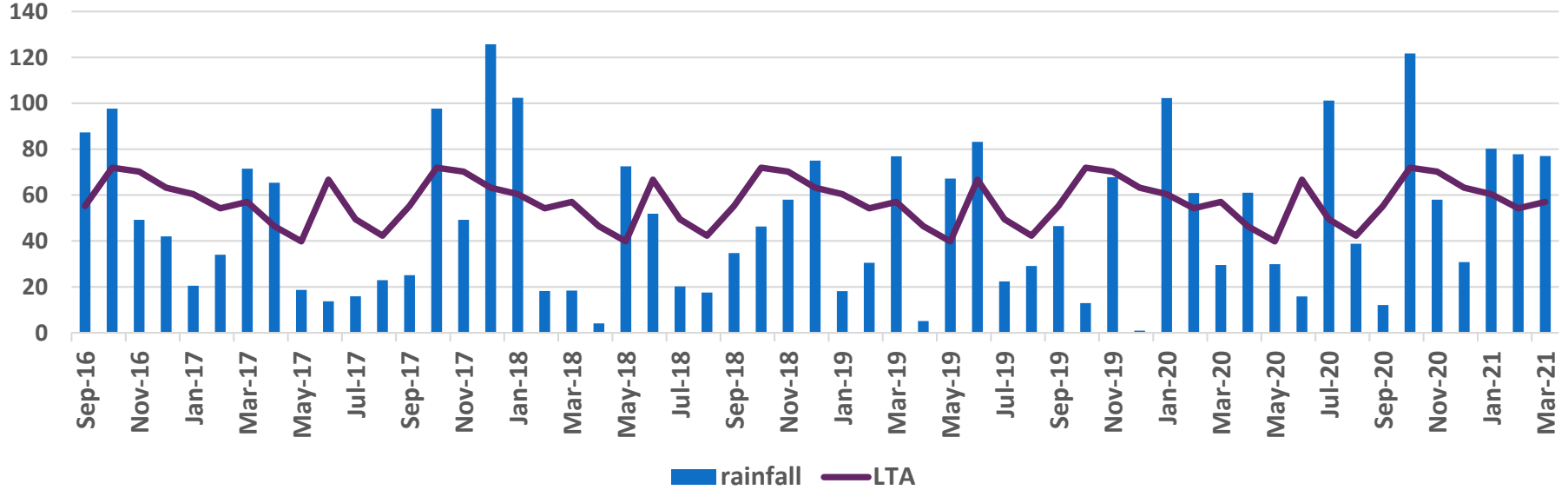


***Bothriochloa macra* – red grass**

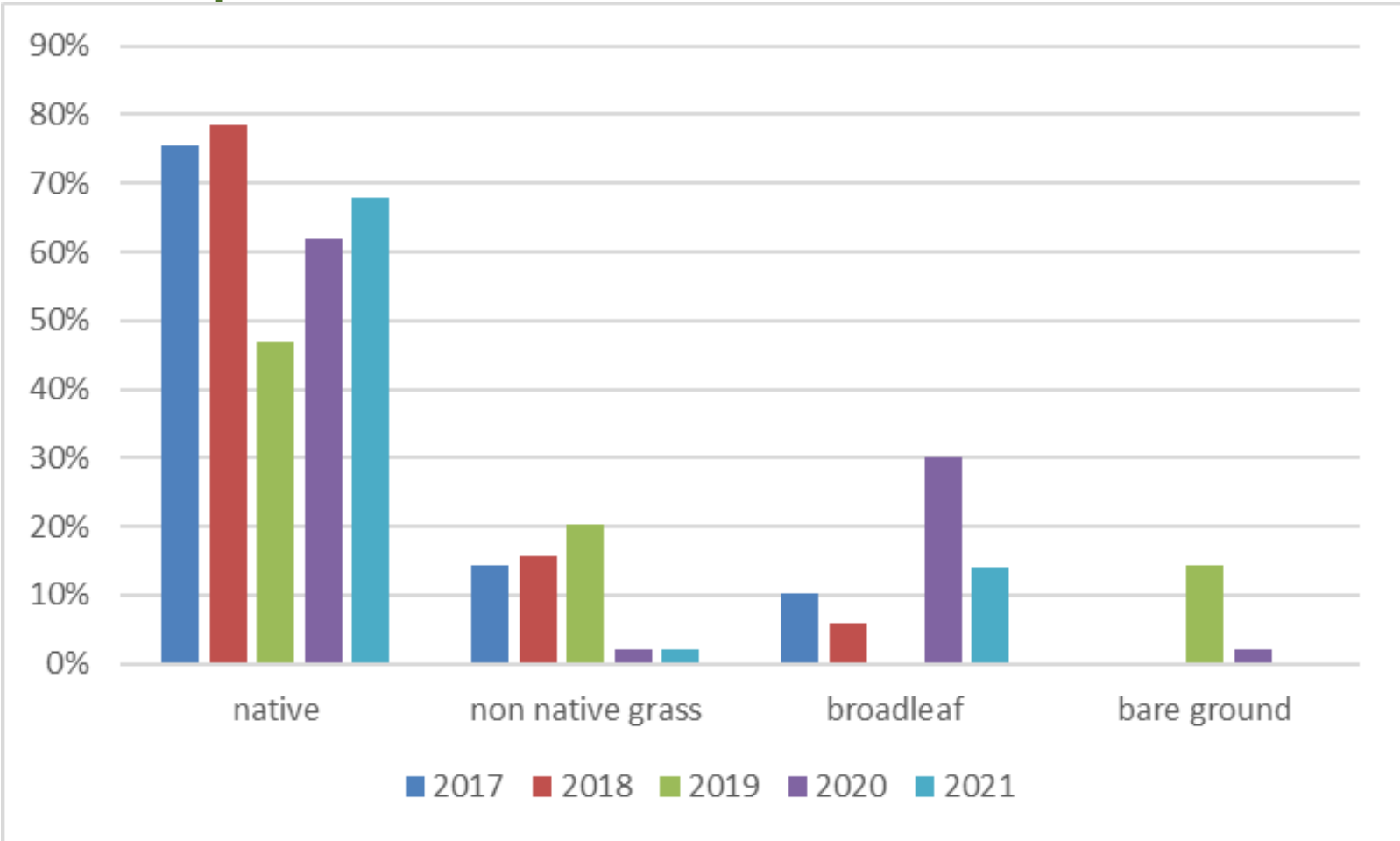




Rainfall

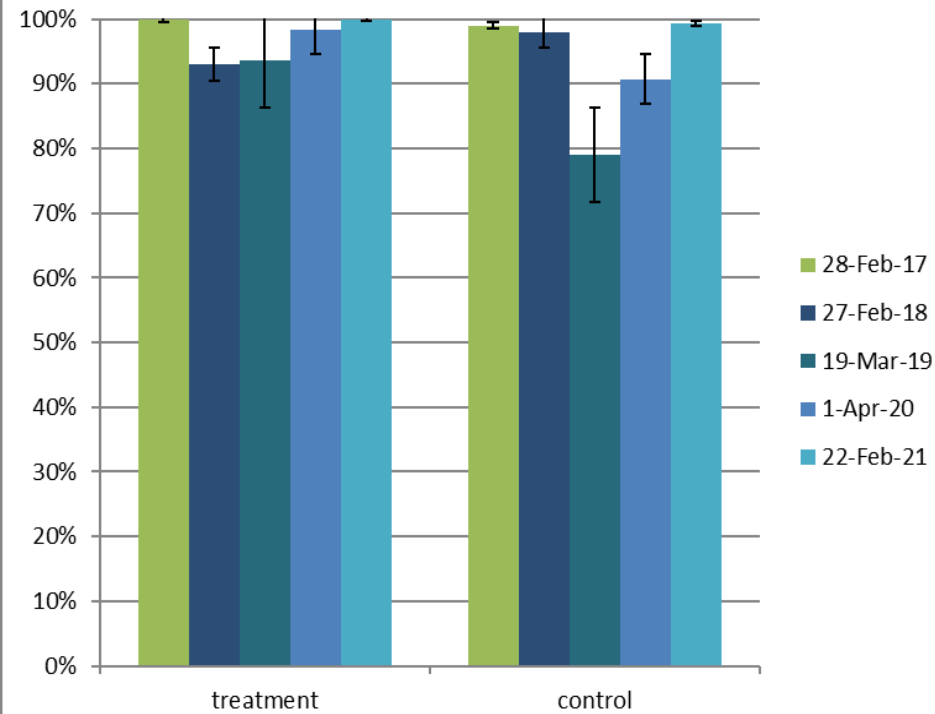


Reedy Flat composition – end of summer

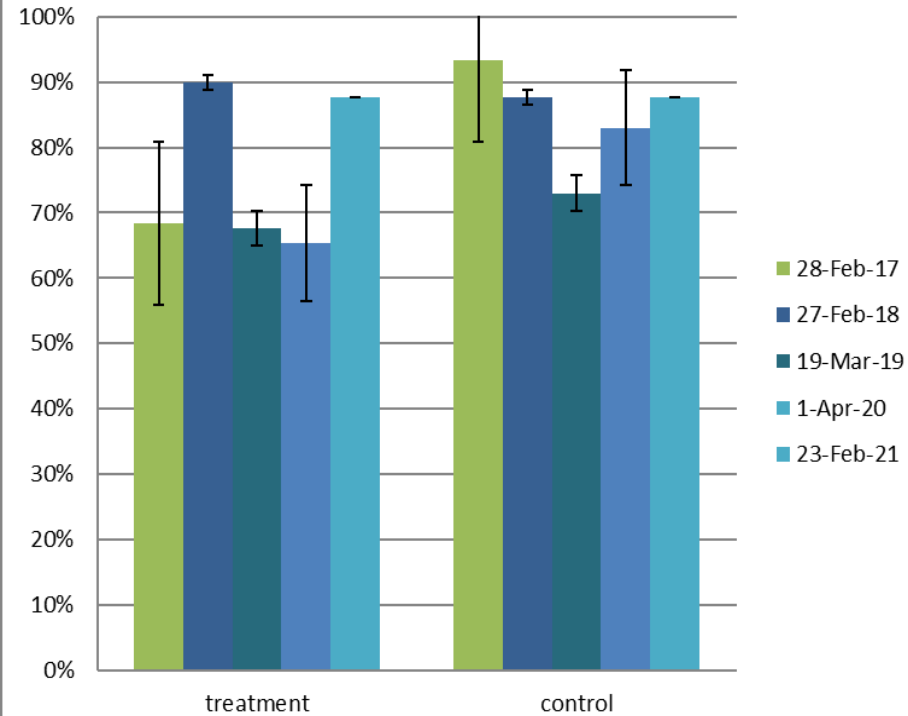


Groundcover

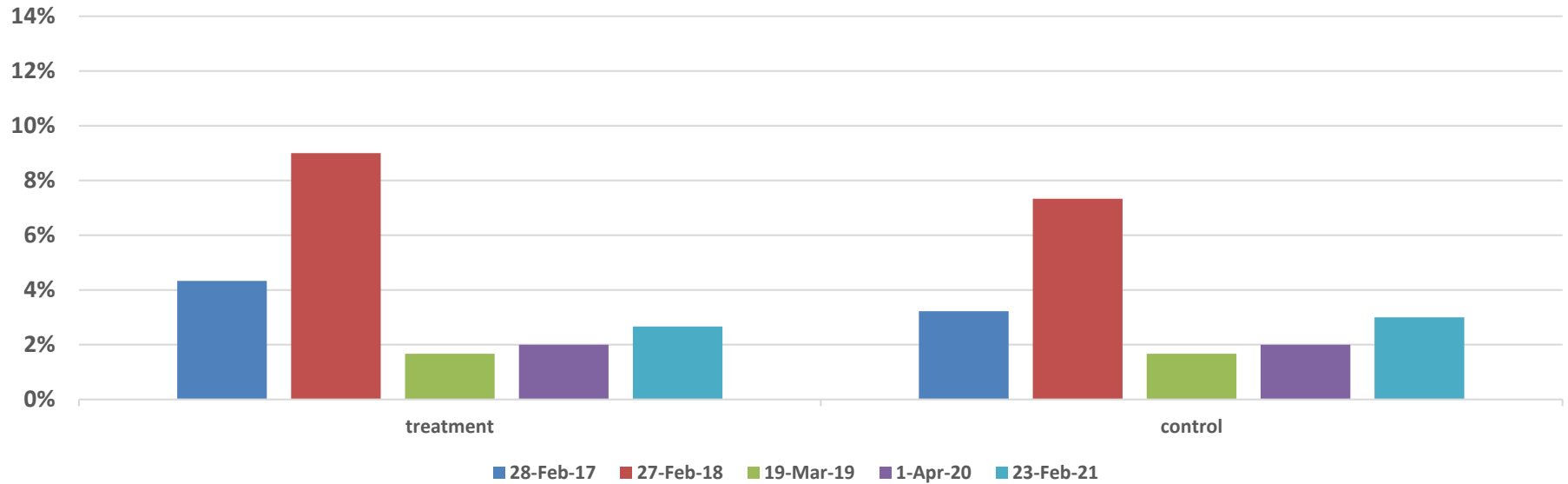
Reedy Flat - Groundcover



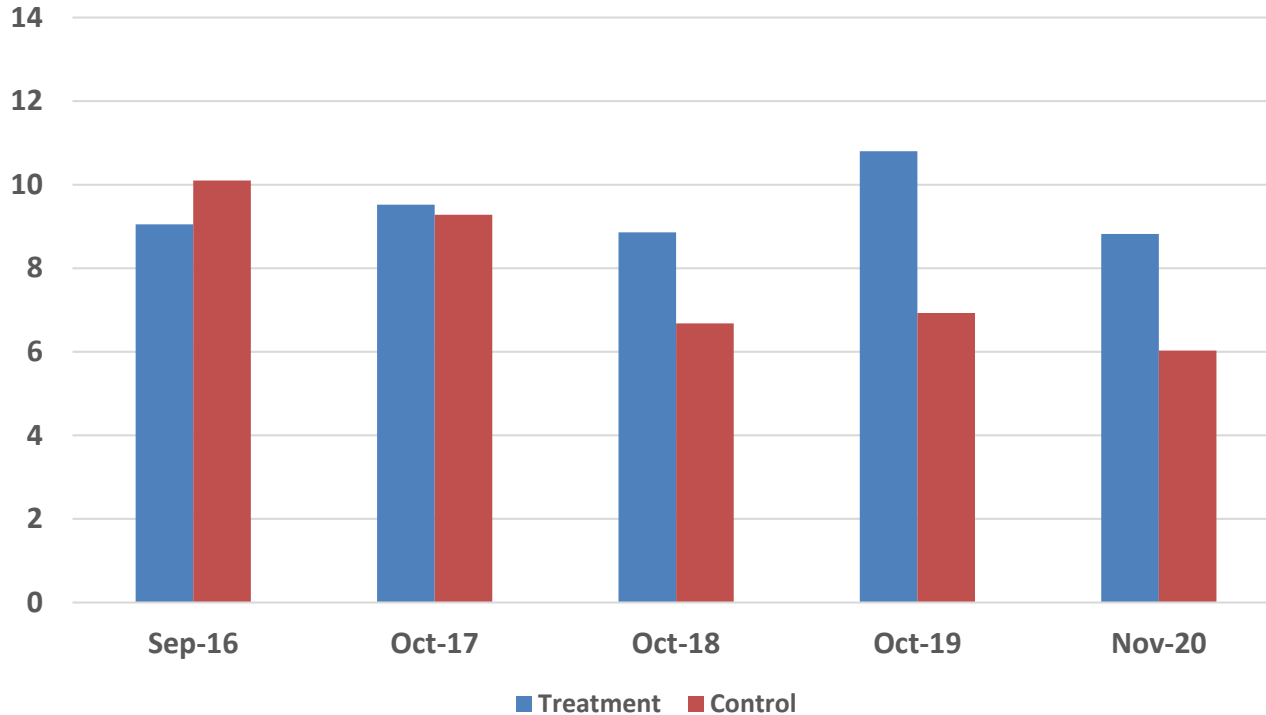
Connors Hill - Groundcover



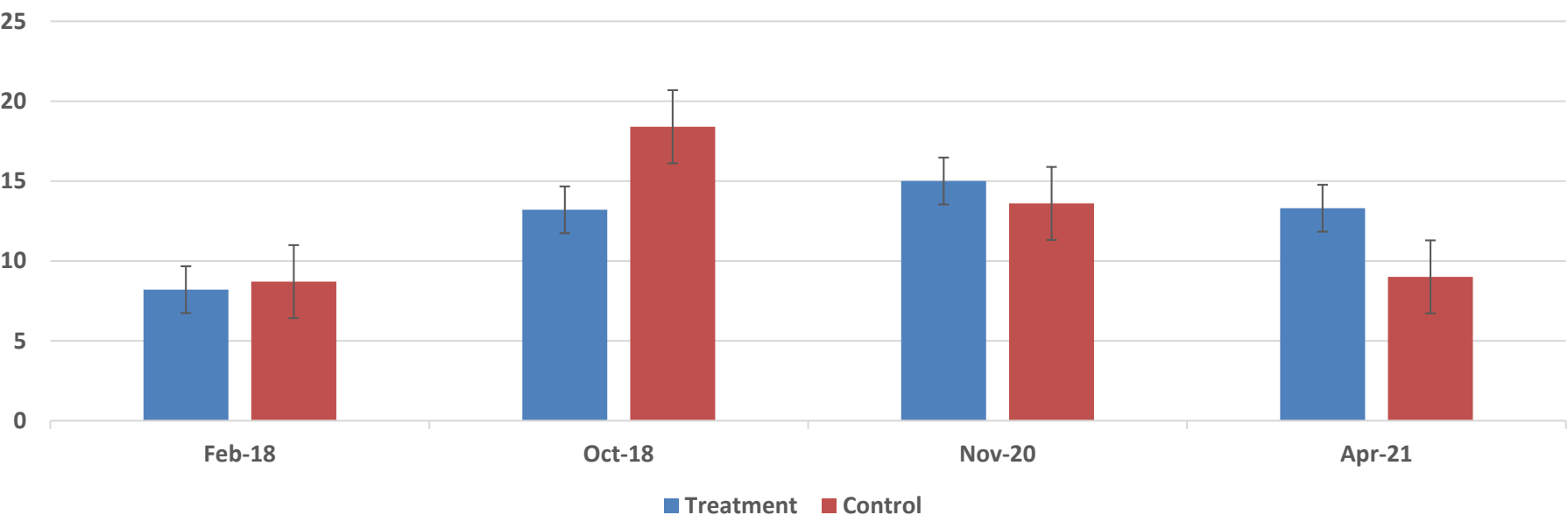
Perennial grass persistence Reedy Flat - Microlaena



Soil phosphorus levels (Olsen P) Reedy Flat



Feed quality data – crude protein (%)



Landholder engagement



Conclusions

- Learn to recognise native grasses
- Target fertility (Olsen P 13 mg P/kg)
=> Lifted nutrient concentration (ie ME and CP) of the native pasture
- Minimum herbage mass (1,000 kg DM/ha) and ground cover (80%) targets
- Avoid long rest periods – as they result in standing dead material
- In late summer retain plant litter to minimise bare ground
- Continuous learning – landholders, extension and researchers

