### APPLICATION ABSTRACTS

Observations on the regeneration of shrubs and woody forbs over a ten year period in grazed quadrats on Mileura Station, Western Australia

#### S.J.J.F. Davies and T.F.M. Walsh

In a study of shrubs at Mileura Station, near Meekatharra in Western Australia, 24 out of 30 species increased in numbers within grazed quadrats over the 10 years from 1967 - 1976. The study showed that at this site the production of wool could be profitable at the same time as the shrubs of the rangeland were regenerating. The time scale over which detectable changes in rangeland plant communities occur is so long that ten years must be considered a short time over which to monitor such changes, and it should be noted that the rainfall was slightly above average over the period studied.

The methods used were simple and could be applied widely to monitor long term changes in the regeneration or deterioration of shrublands in arid Australia.

# A Non-destructive Method for Estimating the Weight of Forage on Shrubs

M.H. Andrew, I.R. Noble and R.T. Lange.

In rangelands work it is often important to know the quantity of forage on offer to stock in particular situations. Estimating shrub forage weight is much harder than estimating herbage weight. In this paper a method is described for application to shrubs, and the results of testing it are presented. The authors think it is very suitable for practical application in shrub rangeland. Forage is estimated per individual shrub, and the forage can be converted easily to an area or paddock basis by estimating the shrubs in a known area.

# Observations on the effectiveness of warren destruction as a method of rabbit control in a semi-arid environment

#### J.T. Martin and J.N. Eveleigh

This paper describes an attempt to destroy rabbits and their warrens over an area of 3,000 ha in a semi-arid environment. The results show that under some seasonal and environmental conditions it is possible to reduce rabbit numbers to a very low level. If small warrens on sandy country are thoroughly ripped during a hot dry period when rabbits are not breeding, both warren and rabbit density will be substantially reduced. Few warrens will become re-established and the density will remain low during the following two years.

However, poor results can be expected if large limestone warrens are ripped when rabbits are breeding or numbers are high. A follow-up treatment to destroy any re-opened warrens is essential under any conditions to consolidate the benefits achieved.

## Poisonous Plants in Northern Territory Rangelands

### A.S. Mitchell.

The ten major poisonous plant species in the Northern Territory are discussed in terms of the habitat, distribution, and toxic components of each. The conditions most conducive to poisoning are also discussed, and range management recommendations outlined for each.