

APPLICATION ABSTRACTS

Daily trapping of sheep at a watering point: a technique for animal nutrition studies under field conditions.

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Animal nutrition studies require large resource outlays for paddock and treatment replication to ensure treatment outcomes are valid. In addition to paddock variations there can be large variations in supplement intake if voluntary feeding is part of a treatment. To overcome these problems, a technique for trapping grazing sheep at the watering point each day was investigated.

Two studies were completed under dry seasonal conditions while two others were conducted under more favourable green pasture conditions. In each study, the sheep were educated to enter the yard surrounding the water trough through a trap consisting of two weldmesh panels. After the education period, treatments were administered to sheep within a race inside the trap yard.

Over 98% of sheep were trapped over the treatment period in both dry season studies. However, under green pasture conditions an average of 86% of pregnant ewes and less than 50% of wethers were trapped. Aversion to the treatments applied in the latter study may have been partly responsible for the poor trapping result which had followed a successful education period. Trapping during dry seasonal conditions offers several advantages for grazing experimentation.

Expert advice for shrub control

J.A. Ludwig

The use of prescribed fire to control shrubs in paddocks with high densities of these "woody weeds" is perhaps the most economic method currently available. However, the decision to burn a paddock involves many difficult issues, of which economics is only one. SHRUBKILL is an easily-used microcomputer program which asks questions and, based on the responses, provides advice on "whether" and "when" to burn a paddock on properties in the mulga and poplar box country of north-western New South Wales and south-western Queensland. The advice given by the SHRUBKILL program is based on the currently best "expert" knowledge of researchers and experienced extension personnel. However, these experts are not always readily accessible. SHRUBKILL provides a way to obtain this expert advice without having to consult the expert directly.

The SHRUBKILL program not only gives advice on "whether" and "when" to burn, but provides a wealth of information on "how" to burn a paddock safely and efficiently, and it can provide an analysis of the costs and expected economic benefits of burning. It was designed to be very easy to use and to provide summary print-outs of the consultation.

Consumption of dingo baits by non-target fauna from the pastoral areas of Western Australia

Alan Eastman and M.C. Calver

Under laboratory conditions some small native mammals will eat wild dog baits prepared from meat or crackle. The smaller wild dog baits based on beef crackle appear potentially the most hazardous since they contain much greater concentrations of toxin because of their small size. To determine whether either bait type is likely to be hazardous to non-target species in normal field usage or whether baits with high target specificity can be designed, further data should be collected on the relative preferences for baits and regular food by non-target species, and on their relative consumption of toxic and non-toxic baits. Field trials to determine the impact of baiting on wild populations are also required.