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IS EFFECTIVE LONG-TERM MANAGEMENT OF RABBITS IN SEMI-ARID REGION RESERVES POSSIBLE? TEN YEARS ON

Peter Watkins[1] and Peter Baker[2]

[1] Department for Environment and Heritage, Oraparinna, PMB 10 via Hawker, South Australia, 5434, watkins.peter@saugov.sa.gov.au
[2] Bakers Vertebrate Pest Control, PO Box 166, Gumeracha, South Australia, 5233

ABSTRACT: Rabbit control is an enormous task requiring long-term commitment. It is also a critical element in managing total grazing pressure within the Flinders Ranges National Park (FRNP) of South Australia. Prior to 1995 rabbit densities in the FRNP were in excess of 1,400 per 100 km transect. In 1995 the release of rabbit haemorrhagic disease (RHD) decreased rabbit numbers to approximately 12% of the earlier recorded levels. This provided an opportunity to initiate a long-term rabbit management program, which significantly assisted in decreasing the total grazing pressure on the park and resulted in improved conditions for natural regeneration of flora. The intensity of infestation in the FRNP was so significant, both in area and rabbit numbers, that the number of warrens remaining post-RHD provided significant refuge for the residual populations. Consequently, focusing on the destruction of existing warrens to prevent their re-use, coupled with ongoing management strategies to ensure minimal reinfestation, was essential.

The methodology included accurately mapping individual warren position and density within a defined area using a GPS and on-ground counting of holes. This was followed by warren destruction, before initiating an ongoing rotational program for all treated areas that also identified optimal harbour requiring more frequent and intense monitoring and maintenance. This outcome not only achieved set target densities by destroying refuge but, equally importantly, provided an analytical approach to determining rabbit 'hot-spots', were conditions were optimal for rabbit numbers to increase rapidly and expand into surrounding areas. Given the aim was to effectively manage a large geographical area (250 square kilometres) over a long time period, this approach meant management decisions could be made in regard to which areas could be managed via a routine rotational program versus those areas that required a higher level of monitoring and maintenance. This rabbit control program in the Flinders Ranges National Parks has successfully demonstrated the effectiveness of thorough, systematic management effort where ecological benefits are now visible.