Spinifex conference - Como July 1990
Summary of discussions at workshop on reintroduction of locally-extinct species and control of feral animals

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Reintroductions

Why bother reintroducing locally extinct species?

Reintroduction can be a useful management tool to increase the security of species by increasing the number of sites at which they persist, to increase understanding of the forces that impinge on a threatened species, and to enhance nature conservation values of a site. It may have additional benefits in increasing the public profile of nature conservation, in education of the general public, and in generating funds for nature conservation. It may also provide opportunities for active participation by Aboriginal people and facilitate and reinforce the cultural involvement of their youth with the traditional values of the land. The negative side of reintroductions is that they are expensive and may have a low probability of success.

The major costs of reintroduction programs in spinifex deserts were seen to relate to the expense associated with remote research and management, the greater logistical problems involved, and the potential competition with other programs for a limited resource pool.

Suggested alternatives to doing reintroductions in the spinifex deserts were reintroduction trials closer to research bases to reduce logistical problems (although densities of exotic predators and competitiors may be much greater) or the concentration of research effort on those species that have persisted in spinifex desert but which are perceived to be under threat (mulgaras, bilbies, rufous and spectacled hare-wallabies). It was generally agreed that each strategy could be profitably pursued if sufficient resources were available.

Which species and which areas should receive priority attention?

Species for reintroduction can be prioritised on a number of bases:

(a) perceived risk;
(b) representativeness (i.e. a spread of species from each taxonomic group that has suffered major decline. This would lead to the inclusion of species with a range of lifestyles: burrowing, surface nesting, arboreal);
(c) likely success (i.e. start with easy species);
(d) importance to Aboriginal residents.

There was no agreement on which was the preferred option for setting priorities.

The spinifex deserts were seen as ideal for reintroductions by some because of tenure (land under CALM control in W.A. cf. aboriginal control in N.T.), and because of perception that this ecosystem is more intact than other land use zones; but regarded unfavourably by others (disadvantages of remoteness creating problems in long-term monitoring and maintenance of feral animal control).

The view was put that reintroductions should have as a primary goal the unravelling of the causes of prior local extinction and hence should be designed in such a way as to separate out the effects of rabbits, foxes and fire regimes.

What needs to be considered before reintroducing a species?

A suggested check-list of practical considerations necessary to undertake a reintroduction program includes:

CONCEPTUAL:

- clear objectives,
- experimental design,
- background information on past successes and failures (what lessons have already been learnt?)

BIOLOGICAL:

- health and numbers of source population,
- captive breeding vs direct translocation,
- knowledge of prior distribution,
- habitat requirements (food and shelter),
- social organisation,
- ability to identify most suitable habitat (appropriate food and shelter, low predator numbers),
- number, sex ratio, age of animals to be reintroduced
- requirements for transport of animals,
- requirements for acclimatisation and settling of animals.

LOGISTIC:

- continuity of funding,
- continuity of human and physical resources,
- ability to implement and maintain management strategies (predator control, fire management) for an indefinite period,
- ability to maintain monitoring effort over establishment period (1-2 years?).

COMMUNICATION:

- with local land managers,
- with local communities (Aborigines),
- with other researchers within project and those working on similar projects.
- with media (inevitably reintroductions will have a

high profile)

BUREAUCRATIC:
- licence for reintroduction,
- licence for application of 1080, cyanide or other poisons,
- restrictions on burning.

Feral animal control

Control of foxes and rabbits and, if possible, dingoes and cats were seen as essential in any attempt to reintroduce species. It was recognised that there was a nexus between fox and rabbit numbers which, in most reintroductions, would require control of both species. Broad-scale control, beyond its use as a tactical tool in reintroductions, was seen as desirable but impractical in the medium-term, because of the size of the areas involved and the cost of control. Developments in biological control may greatly increase practicality and economics of control in 10 - 20 years.

Camels were targeted as a species that may have increased in numbers substantially over the last decade and of which little was known of its effects on the desert ecosystem. It was suggested it should receive some research attention rather than immediate control.