

Progress Report SP 2003-005

Development of effective broad-scale aerial baiting strategies for the control of feral cats

Animal Science

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Project Team

granted

Program Leader

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Directorate

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Development of effective broad-scale aerial baiting strategies for the control of feral cats

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Context

The effective control of feral cats is one of the most important native fauna conservation issues in Australia. Development of an effective broad-scale baiting technique, and the incorporation of a suitable toxin for feral cats, is cited as a high priority in the National Threat Abatement Plan for Predation of Feral Cats, as it is most likely to yield a practical, cost-effective method to control feral cat numbers in strategic areas and promote the recovery of threatened fauna.

Aims

- Design and develop a bait medium that is readily consumed by feral cats.
- Examine bait uptake in relation to the time of year, to enable baiting programs to be conducted when bait uptake is at its peak and therefore maximise efficiency.
- Examine baiting intensity in relation to baiting efficiency to optimise control.
- Examine baiting frequency required to provide long-term and sustained effective control.
- Assess the potential impact of baiting programs on non-target species and populations and devise methods to reduce the potential risk where possible.
- Provide a technique for the reliable estimation of cat abundance.

Progress

- Research into bait composition continues with the objective of further improving bait uptake. Chemical synthesis of several compounds that elicit a chewing response by cats has been achieved. One of these compounds is currently being assessed in bait uptake trials. Bait production is being reviewed with the objective of further improving bait palatability and longevity in the field.
- Feral cat baiting programs on the Fortescue Marsh (Pilbara) has been conducted yearly since 2012. All campaigns have resulted in statistically significant declines in cat occupancy rates in the baiting area.
- Research into the effectiveness of baiting strategies is continuing to be assessed under the temperate climatic conditions of the south-west at sites including Cape Arid and Fitzgerald River National Parks. The baiting programs fortuitously conducted prior to the Cape Arid National Park wildfire in November 2015 contributed to an apparent stabilisation in the critically endangered western ground parrot population and significant population increases in number of other species, including the southern brown bandicoot. Similar results have been achieved at Fitzgerald River National Park where anecdotal increases in a number of native bird and mammal species have been observed.
- Stage 1 of the management plan for the control of cats on Christmas Island has been completed with all domestic cats now desexed, microchipped and registered. Stage 2 of the plan is continuing and involves the removal of all stray/feral cats from residential areas and surrounds. Stage 3 of the plan - island-wide eradication of feral cats commenced in 2015 and control effort continue for the next two years prior to a surveillance period to confirm eradication success.
- Work continues on improving and refining cat lure options.

Management implications

- Development of effective baiting methods across climatic regions will ultimately provide efficient feral cat control at strategic locations across the state and lead to conservation benefits.
- Successful eradication of feral cats from a number of islands off the Western Australian mainland has occurred over the past ten years (i.e. Hermite, Faure and Rottnest islands), allowing the persistence of the

native fauna on these islands and enabling effective reintroductions of mammals where appropriate. Eradication of cats on Dirk Hartog Island and Christmas Island will significantly add to the conservation of biodiversity in Western Australia.

Future directions

- Continue refinement of bait medium to improve bait consumption by feral cats.
- Analyse baiting effectiveness at the various research sites and refine the method of operation where necessary to optimise baiting efficacy.
- Further investigation of bait consumption by non-target species and devise methods to minimise risk (eg. toxin encapsulation).
- Refine and optimise cat lure options.