

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

granted

Directorate

required

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

- Refinement of bait composition is continuing with the objective of further enhancing bait uptake. Chemical synthesis of several compounds that elicit a chewing response by cats has been achieved. In addition, natural sourcing of these compounds is being undertaken to reduce costs of production. One of the main ingredients of the bait matrix is being evaluated against an alternative, in a series of pen trials, to test whether bait palatability and also longevity can be improved.
- Analysis of GPS radio-collar data is being conducted to assess whether bait encounter rate can be increased by modifying bait deployment.
- Refinement of the trapping technique to minimise risk to non-targets yet maintain effectiveness in feral cat capture is ongoing. A Standard Operation Procedure (SOP) for cat trapping is now being developed and a manuscript drafted for publication.
- An encapsulated 1080 toxin bait (*Hisstory*) was tested last year in the Kimberley as a baiting option where non-target species (e.g. northern quoll) may be considered at risk from the 1080 direct injected *Eradicat*® baits. This study has led to research into the development of a bait that also minimises the risk to wild dog/dingo hybrids while maintaining its effectiveness for feral cat control.
- Work continues on improving and refining several cat lure options. A collaborative project is being undertaken with Phillip Island Nature Park (Victoria) to investigate visitation and re-visitation rates to olfactory attractants.

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, and the techniques developed during the course of these programs, will significantly improve 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 (e.g. toxin encapsulation).
- Refine and optimise cat lure options.