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

Animal Science

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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 to improve bait attractiveness/palatability has continued with pen trials underway to assess incorporating two additional amino acids into the mix.
- Oil derived from a plant that elicits a chewing response in cats is also being examined to see if it enhances bait palatability and bait consumption.
- Trials of the *Hisstory*® feral cat bait for use in northern Australia continue with pen trials showing that the formulation is an efficacious toxicant for feral cats.
- Field efficacy trials demonstrated that *Hisstory*® is unlikely to present a significant hazard to native species, but techniques to minimise the risk to wild dogs/dingo hybrids have proved less successful.
- A manuscript about using activity and movement patterns to improve the rate of bait encounter during large-scale aerial baiting for feral cats has been submitted to *Australasian Journal of Environmental Management*.
- Refinement of the trapping technique to minimise risk to non-targets yet maintain effectiveness in feral cat capture is ongoing.
- Work continues to improve and refine several cat lures.

Management implications

- Development of effective baiting methods across climatic regions will ultimately provide efficient feral cat control at strategic locations across mainland Western Australia and lead to significant conservation benefits.
- Successful eradication of feral cats from a number of islands off the Western Australian mainland has occurred over the past ten years (Hermite, Faure, Rottnest and recently Dirk Hartog Island), allowing the persistence of the native fauna on these islands and enabling effective reintroductions of mammals where appropriate, and restoration of habitat and ecosystem processes.

Future directions

- Continue refinement of bait medium to improve bait consumption by feral cats.
- Analyse baiting effectiveness and refine the method of operation (targeted/strategic) where necessary to optimise baiting efficacy.
- Progress the development of feral cat baits with a minimised risk to canids through emesis to avoid intoxication.
- Undertake field efficacy trials for the *Hisstory*® feral cat bait.
- Further investigate bait consumption by non-target species and devise methods to minimise risk.
- Continue to refine and optimise cat lure options.