

CASE STUDY

Review of an eradication programme – eradicating European starlings from Western Australia

The general issue

Many private or government agencies that manage invasive species projects require independent and critical reviews or audits of their projects to fulfil the need to be accountable to those funding the work.

A fresh view can be constructive. For uncompleted eradication projects the main question centres on whether the work to date is on-track and the goal of eradication is likely to be achieved. For successful projects the main questions relate to assessing the efficiency of management undertaken and collating lessons for the future.

The challenge of keeping Western Australia free of European starlings

The European starling is a major pest of horticulture and other crops in many countries to which it has been introduced. They were introduced into the eastern states of Australia in the 19th century and have spread over most of the south-eastern states. However, the vast expanse of the Nullabor desert has deterred starlings from colonising Western Australia - at least until the last few decades.

Since 1971 several small populations of starlings have appeared in Western Australia and the threat of damage to crops led the government to act to prevent permanent establishment. The initial small groups of invaders were relatively easily eradicated, but in 2001 a larger population was discovered. This population has been the focus for an eradication attempt since 2001.

The annual cost of this project has escalated from about A\$300,000 in 2001/02 to nearly A\$3 million in 2007/08 - and there are still starlings left. The Western Australian Department of Agriculture and Food asked Landcare Research to review progress with the project to determine if eradication could be achieved within the pre-set timeframe (by 2009/2010) and within budget.

(continued...)



Feeding the lure birds in a starling trap, Munghlinup, Western Australia

Our approach

We reviewed the project's strategy and tactics using an established feasibility study process to consider whether the rules, constraints and risks were being met and effectively managed.

Apart from the uncertainty about ongoing immigration, the project met the conditions for successful eradication. However, we thought managers would be wise to budget additional funds for ongoing surveillance to 'mop up' survivors, or to detect and kill new immigrants beyond 2010.

The progressive escalation of the project meant the project team was probably not structured in the most efficient way – a common issue for all large-scale projects that have to adapt their governance and management to changing circumstances.

The project team had successfully mapped the extent of the starling infestation and killed an impressive total of nearly 3000 birds by trapping using live-traps and by shooting. This has reduced the population to a small remnant that should (with luck - or bad luck from the starlings' point of view) be eradicated over the next few years.

The outcome

Our report reassured departmental decision-makers that their starling-busters were on track and capable of eradicating the remnant population.

We noted that re-invasion from the east was probable but that data collected by the starling busters during the current campaign could be used to:

- (a) inform eradication success – in much the same way as it did for feral pigs on Santa Cruz Island (see the relevant case study), and
- (b) help design an efficient, on-going surveillance system to quickly detect and more-easily remove any new incursions into the state.

Reference

Parkes, J.P. (2008). Review of the attempt to keep Western Australia free of starlings (*Sturnus vulgaris*). Landcare Research Contract Report LC0809/45.

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