FENCING OUT FOXES — INCREASING CURLEW NUMBERS IN THE MURRAY CATCHMENT

OVERVIEW of the project

The Murray catchment in southern New South Wales is one of the last remaining strong holds for the Bush Stone-curlew, which is now considered endangered. In the past the Bush Stone-curlew was found across much of the state. The Bush Stone-curlew is a large (52 to 58 centimetres), ground-dwelling, nocturnal bird, that lives in open wooded country. The decline of this bird is the result of loss of habitat to agriculture and urban expansion and predation by exotic predators, particularly foxes and feral cats.

The Nature Conservation Working Group's goal is to conserve and enhance ecosystems and biodiversity in the Murray catchment, including that of the Bush Stone-curlew. This project has considered the effect of different fencing regimes on excluding predators, as well as biological and chemical control programs to reduce pest species. In addition, a range of community awareness initiatives and educational materials were



Bush Stone-curlew

produced, with the aim of improving the community's awareness and understanding, and empowering them to protect the remaining birds and their habitat. Throughout the duration of the project over 2,000 stickers, 200 brochures and 80 t-shirts were produced and distributed, 15 school visits were undertaken and two farm field days were conducted which were attended by 180 people.

how the project was carried out

One of the main elements of this project was the predator protection program which ranged from an extensive fencing trial to regional fox baiting. Three sites were chosen for the trial, based on the availability of suitable habitat and known populations of Bush Stonecurlews. The fencing trials used standard height electric fencing on various sized land parcels, based on a University of New England design used to protect free-range chickens. The fencing allowed for free movement of the birds, while excluding predators. Whilst the fencing was effective protection, it was not cost effective.

At all sites, fallen timber and leaf litter were retained to provide habitat and camouflage for the curlew. Grazing management practices were also introduced, excluding stock from known nesting sites during the breeding season (to prevent trampling of eggs and chicks), but allowing grazing outside these periods to keep grass low and thin (as dense thick grass will prevent nesting and reduce the ability of the bird to see predators approaching). Insecticide use was also suspended on these sites, as insects are the curlew's main source of food. Free fox baits were provided to property owners within a 10 kilometre radius of known bird populations.

A community awareness program was undertaken which included radio interviews, school visits, farm field days, individual landholder visits and a curlew summit. Educational materials were also produced to support the awareness program and included information pamphlets, posters, stickers, t-shirts and a Bush Stone-curlew puppet that made a curlew call.



Bush Stone-curlew sticker

OUTCOMES now and in the future

There has been a notable increase in the number of young birds and chicks observed within the study areas. This has coincided with a decrease in the number of foxes present. It is believed that this decrease in foxes is a result of the baiting program and drought conditions in the region. Curlews are now successfully breeding without the need for fox proof enclosures, as a result of this decrease in fox numbers.

The standard height electric fencing tested during this project was compared with two existing trial sites with-in the catchment that used electrified high chicken wire. It was determined that the tall fences require less monitoring to ensure that they remain predator free, while low fences only remained effective while power was operational. It was also concluded that the curlews required larger sites, therefore fox-proof fencing must be large enough to support the parents and chicks for a number of months.

benefits, challenges & lessons learned

This project has provided a future for the curlew in the Murray catchment. By offering an opportunity for chicks to survive it has bought youth back into what was an ageing population. There has also been the added benefit of increased habitat through protection and enlargement of existing remnants, through tree planting and the establishment of buffer zones of unimproved uncultivated pasture around woodland remnants.

The fencing trails have proved to be expensive and not the most cost effective way to protect the curlew. It appears that baiting of predators, in combination with habitat restoration and protection are the best way of protecting the Bush Stone-curlew.





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