

Public Administration Committee

From: Peter Robertson <peter.robertson@wilderness.org.au>
Sent: Wednesday, 20 August 2014 11:22 AM
To: Public Administration Committee; Piers Verstegen
Subject: Murdoch research on baiting

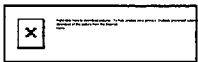
Hi

Please find link to paper referred to in today's hearing.

"In all, 99% of baits monitored by cameras were taken by non-target species and quokkas took 48% of them."

<http://www.publish.csiro.au/?paper=WR13136>

PR



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 Contents Vol 41(2)☐ Subscriber LoginUsername: Password: **First in, first served: uptake of 1080 poison fox baits in south-west Western Australia**Shannon J. Dundas ^{A B}, Peter J. Adams ^A and Patricia A. Fleming ^A^A School of Veterinary and Life Sciences, Murdoch University, South Street, Murdoch, WA 6152, Australia.^B Corresponding author. Email: S.Dundas@murdoch.edu.au*Wildlife Research* 41(2) 117–126 <http://dx.doi.org/10.1071/WR13136>
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Abstract

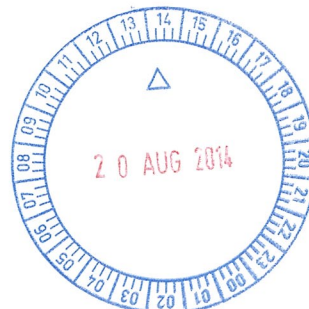
Context: In Western Australia, baits containing 1080 poison are widely used to control the red fox (*Vulpes vulpes*) for fauna conservation. Despite long-term (15–17 years) baiting programs, bait uptake by target and non-target species is largely unknown, but affects baiting efficacy.**Aims:** We examined bait uptake of 1080-poisoned fox baits laid according to current practice at seven riparian sites in the northern jarrah forest (of south-west Western Australia). There, intensive baiting regimes have been implemented for the protection of quokka (*Setonix brachyurus*) populations.**Methods:** Over 9 months, 299 Pro bait[®] baits were monitored regularly to determine their persistence, and, at 142 of these, Reconyx HC500 remote cameras were used to identify the species taking baits. To compare bait uptake with species presence at these sites, we calculated an activity index for each species from the number of passes of animals in front of the cameras.**Key results:** The species taking baits was identified for 100 of the baits monitored with cameras, and, because of multiple species taking baits, 130 bait take incidents were recorded in total. The fate of 40 of the baits was not discernible and two baits were not removed. In all, 99% of baits monitored by cameras were taken by non-target species and quokkas took 48% of them. The majority of baits (62% of the total 299 monitored) were taken before or on the first night of deployment, and 95% of baits had been taken within 7 days. With the exception of feral pigs, which took more baits than predicted from their activity index at these sites, baits were taken in proportion to the activity index of species. Foxes were present at four of the seven sites, but only one fox was observed taking a bait.**Conclusions:** The high level of uptake of baits by non-target animals reflects their diversity and abundance at these sites, but also significantly reduces the availability of baits to control foxes.**Implications:** Strategies to reduce non-target bait uptake and increase bait availability for foxes are required.**Additional keywords:** fox baiting, Reconyx HC500, remote cameras, sodium fluoroacetate, threatened species.

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