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BREAKING THE BARRIERS

INNOVATING TO IMPROVE ECOLOGICAL OUTCOMES
ON TRANSPORT AND OTHER LINEAR INFRASTRUCTURE
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IMAGE CREDIT: ROB APPLEBY, WILDSPY/GRIFFITH UNIVERSITY



ABSTRACT

Fit-for-purpose or flawed? A critical look at lizard salvage practices in Aotearoa, New Zealand.

According to the Conservation status of New Zealand Reptiles (2021), 116 taxa (93%) are classified as Threatened or At Risk, with only five taxa classified as Not Threatened. Under the New Zealand Wildlife Act 1953 (administered by the Department of Conservation (DOC)), all native lizard species are protected. To meet legal requirements on transport projects, lizard salvage is often proposed to minimise adverse effects of physical works - such as vegetation clearance - on lizard populations. However, many questions remain for DOC in issuing permits to handle protected wildlife, for project teams and clients: • What is the size of the lizard population? • Will the salvage methods proposed be effective? • Will the relocation be effective to meet the outcomes sought? • Is the budget better spent towards an ex situ lizard conservation project? Current survey and salvage methods are based on the DOC Herpetofauna Toolbox, which was originally developed for scientific research rather than for pre-construction survey and salvage. Yet, lizard salvage has occurred for decades in Aotearoa - should we not have evidence of what methods work best and for which species? And should we not have developed more efficient, fit -for-purpose methods that improve survey and salvage outcomes for mainland lizard populations? This presentation shares findings from three lizard survey and salvage projects, comparing the efficacy of different methods used to capture native lizards. Results show variations across methods, with no one size fits all. The presentation discusses a possible solution through the collation of existing knowledge to enhance our understanding of method effectiveness through which survey data quality can be improved to inform both salvage operations and associated conservation strategies. Finally, it discusses further research needs into survey and salvage techniques.

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KEY TAKEAWAYS

1. Lizard salvage practice in New Zealand is flawed
2. collation and sharing of existing knowledge may lead to better outcomes
3. Further research is needed to develop fit-for purpose methods for lizard salvage

SPEAKER BIOGRAPHY

Dr Rieke Behrens works as Senior Terrestrial Ecologist with Tonkin + Taylor based in Auckland, New Zealand. She has worked in a number of transport projects since starting with T+T in 2017 and is currently the Lead Ecologist on O Mahurangi Penlink - a motorway project in North Auckland. Rieke's background is in landscape ecology and she enjoys multi-faceted projects bringing together ecology, restoration and conservation, nature-based solutions and sustainability.