

**IMPACT ASSESSMENT OF OIL AND GAS WELLS ON REPTILES AND SMALL
MAMMALS IN THE STRZELECKI DESERT, S.A.**

Julian Reid⁽¹⁾ & Jake Gillen⁽²⁾

⁽¹⁾CSIRO, PO Box 2111 Alice Springs N.T. 0871

⁽²⁾PO Box 902 Norwood S.A. 5067

The impact of gas and oil wells on the small terrestrial vertebrate fauna in the Strzelecki Desert, S.A., is being assessed using pitfall traps.

A three-tiered sampling design has been employed. Ten replicates in each of the two dominant habitats, dune and interdunes, have been established at gas/oil wells, at 1.5 km distance from those same wells, and in a Control (i.e. no production) Field approximately 20 km distant.

Results, while preliminary, do not indicate a detectable impact on reptiles and small mammals in the immediate vicinity of the wells, nor in the peripheral zone of the Production Fields as a whole.

This case study is presented as an example of the type of research required to be undertaken in spinifex deserts and the Australian arid zone generally to assess impact on the environment of current land-use and management practices. Intensification of land-use within the arid zone is expected to occur, but with appropriate research, political will and ensuing management, impacts could be minimized so as to not further jeopardize long-term biogeographic and evolutionary processes.