

RESEARCH DIRECTIONS

Wolgan Valley Biodiversity

Dr Julie Old, Dr Ricky Spencer and Mr Jack Wolfenden from the School of Natural Sciences are investigating biodiversity in the Wolgan Valley NSW and the effects of a “predator-proof” fence in controlling the impact of feral animals on the native fauna population. This research was funded by the Emirates Hotels (Australia) Pty Ltd.

‘Feral animals such as foxes and cats are a real threat to native animal diversity and numbers’, says Dr Old. ‘Foxes can be managed to an extent, but feral cats are very difficult to control. Predator-proof fencing can be used over small areas to protect sensitive ecosystems or endangered species. Such fencing is being used around a development being constructed in the Wolgan Valley west of the Blue Mountains. The development includes a conservation area within the 4,000 acres of old farmland with tree-planting, flora and fauna protection and long-term reintroduction of endangered species. A number of native animals in the area are threatened, including koalas, quolls and bandicoots and local waterways have been damaged by agriculture and mining. This study will assess local biodiversity and feral predator management programs in order to maintain these conservation efforts.’

The researchers will assess and catalogue biodiversity of the area. Current theory about the reintroduction of native animals will be tested using population viability analyses, and the study will measure the impact of foxes and feral cats on this population and the effectiveness of a “predator-proof” fence in controlling these predators. Trapping and baiting trials will be implemented in the unfenced areas for comparison. The research will also test the quality of the waterways on the land as these reflect the overall health of the ecosystem of an area.



Accurate knowledge of the diversity and population numbers of local native species of the Wolgan Valley area is important for determining the effectiveness of protection efforts. Successful aspects of these programs may lead to the development of feral predator and native species management programs that can be applied in other conservation environments in Australia.

Project Title: Wolgan Valley Biodiversity
Funding has been set at: \$81,727
Contact Details: j.old@uws.edu.au
http://www.uws.edu.au/natural_sciences
September 2009