

## Losing a biodiversity jewel

**Conservation scientists are discovering that our travelling stock routes (TSRs) are an important piece of biodiversity infrastructure, especially precious in connecting up our landscapes in a time of climate change. But, just as their natural value is being recognised, it's also becoming clear that they are under a large and growing threat.**

"Few people recognise the potential of road and rail reserves and stock routes as wildlife corridors," says Dr Bob Sutherst, an ecologist at the Spatial Ecology Lab at the University of Queensland. "However, considered together they offer us a precious biodiversity resource."

Along with colleagues Judit Szabo and Evan Cleland, Bob is keen to underline the extent and value of the stock route network. He points out that in NSW, the TSRs and road reserves cover about 5% of the state, nearly as much as the 7% dedicated to National Parks. In Queensland stock routes cover 71,650 km or 2,601,510 ha, plus 762 stock reserves of 395,879 ha and 742 water facilities. These ribbons of public land form part of the so-called 'Unseen Conservation Estate'.

"When you look at the maps of the stock routes in NSW and Queensland you quickly appreciate that they offer a magical network in terms of connectivity," says Bob. "Imagine if you got an area where you're trying to generate some mechanism to help species move through the landscape and you suddenly discovered the extent of the stock routes."

Whereas reserves are discontinuous and tend to be targeted to a specific landform or vegetation, stock routes and roads are continuous and incorporate a variety of local landform and vegetation types, and watering points. They



*The network of travelling stock routes in NSW and Queensland. "They offer a magical network in terms of connectivity", says Bob Sutherst.*

Don't it always seem to go  
That you don't know what you've got  
Till it's gone

*Excerpt from Big Yellow Taxi  
(by Joni Mitchell)*

also often contain fertile soils, remnant vegetation and much greater biodiversity than adjoining private, grazed land.

In the context of climate change, road and rail reserves and stock routes form an extraordinarily fortuitous, extensive network of corridors, which, with a contribution from the road network itself, could facilitate the movement of species in response to shifting climatic zones. This network is in public hands and its potential in protecting biodiversity under climate change makes it imperative that local, state and federal governments recognise and manage them for their biodiversity values.

But the job of protecting this far flung, multi-jurisdictional asset is a complex one. In New South Wales stock routes are under separate tenure to roads and managed as such. And the state is moving to divest itself of some stock routes in an attempt to 'rationalise' its investment.

In Queensland stock routes are considered part of the road system, with limited management for its biodiversity values. Many are leased for static grazing which threatens their value to wildlife. A Stock Route Network Management Bill is proposed to bring a degree of regulation—but no additional funding has been provided by State or national environmental agencies to enable local governments to implement the policies.

"Current funding models do not recognise the national environmental and social benefits that transport routes provide for Australia," says Bob Sutherst. "Neither Queensland nor NSW included climate change in their last reviews of stock route policy. With the advent of climate change, it is time to strengthen the protection of biodiversity offered by this network. The opportunity to adopt new biodiversity and public use policies and legislation, with state and national environmental funding, to protect endemic species and rehabilitate degraded sections of these routes should not be lost.

"There is also scope for widening biodiversity corridors opportunistically by enhancing the native vegetation on adjoining properties and strategically purchasing adjoining land when it becomes available.

"These iconic stock routes and road networks connect the seen and unseen conservation estates and their protection and enhancement could give the term the Long Paddock a whole new meaning under climate change. Do we have the vision to capture the moment before it passes?"

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### Further reading

Sutherst, B, Szabo, J, and Cleland, E (2007)

The Stock Routes and road network—strengthening the biodiversity links, The State of Australia's Birds, 2007 (in press)