# The Long Paddock Scientists' Statement Saturday, 16 August 2008

On open letter to the Queensland Premier Anna Bligh and the New South Wales Premier Morris Iemma on the need to protect the Travelling Stock Route Networks in QLD and NSW

Dear Premiers Bligh and Iemma,

We, the undersigned Australian scientists, write to you concerning the need to protect and manage the entire Travelling Stock Route Network in Queensland (SRN) and New South Wales (TSR).

The relevant roads and reserves that make up the travelling stock route networks have nationally important environmental, cultural heritage, economic and recreational values (Queensland Department of Natural Resources and Water 2007). They cover 2,600,000 ha in Qld and 600,000 ha in New South Wales. These multiple values make them a national asset for the Australian community.

While the network has been managed publicly for generations, it is under immediate threat from the changes in ownership or delegated management being considered by your governments. This is at a time when it offers vital resources to help Australia's livestock industries adapt to greatly increased oil prices and Australia's biodiversity adapt to climate change.

# The Travelling Stock Routes Network is an important environmental asset

Travelling Stock Routes and Reserves provide refuge for many endangered species and ecosystems, seed sources for environmental restoration programs and allow wildlife movement. The network includes long, vegetated corridors and other important reserves covering many climates and soil types, so they provide a comprehensive sample of our landscape and biodiversity (Sutherst *et al*, 2007).

In many cases these are the best remaining examples of native vegetation in highly cleared landscapes, such as the flat, fertile land west of the Great Dividing Range (Spooner & Lunt 2004). In particular, the network has been found to provide one of the main opportunities for improving the conservation status of threatened ecological communities such as grassy white box woodlands (Prober 1996).

Thus, the network supports a diverse suite of native plants and animals, including many that are rapidly disappearing from many agricultural areas (Hibberd 1978; Freudenberger and Drew 2001).

The network, complemented by other road reserves, provides important corridors and stepping stones between large areas of natural vegetation (e.g. national parks and state forests)

facilitating the movement of animals and plants (individuals and genes) across the landscape (Dennis 1992; Prober *et al* 2001).

Studies conducted on individual parts of the network identify high biological values. However, there is a need for a comprehensive review of the ecological functions of the entire network. It would be unwise for major decisions on future management of the network to be made before such information is available.

Stock routes also provide ecosystem services to adjacent agriculture lands - for instance, protection from wind erosion, and providing habitat for pollinators and agents of biological pest control. Over the past decade, State and Federal governments have invested billions of dollars (e.g. Natural Heritage Trust, NSW Environmental Trust) in projects to restore degraded agricultural lands.

Retention of original vegetation, such as that found in stock routes, is by far the most efficient way of allowing landscape restoration (Possingham *et al.* 2002). These areas provide a backbone for re-vegetation, and are a major source of critical resources for revegetation such as seeds of locally adapted plant species (Metcalfe 2004).

A major value of the network is in its integrity and geographical extent. Without the entire network, the particular values of some of the parts cannot be fully realised - the value of the whole network is greater than the sum of the value of the individual parts.

# The use of Travelling Stock Routes for carefully managed transient grazing can be compatible with protection of environmental values

The historical pattern of intermittent grazing of stock routes has, in general, delivered them to the current generation in a much healthier state than similar environments on adjoining grazing and agricultural lands (Metcalfe 2004; Davidson, Scammell et al. 2005).

This management of the network for multiple uses has been enabled by the stewardship of rangers, many of whom have extensive knowledge and practical management skills. For instance, in grassy eucalypt woodlands in NSW, highest biodiversity has been found in areas that were subjected to intermediate levels of grazing (McIntyre and Lavorel 1994). Similarly, in stock routes of central Queensland, sporadic dry-season grazing has contributed to the survival of the endangered perennial herb *Trioncinia retroflexa* (Fensham, Fairfax et al. 2002). The response of herbaceous vegetation to grazing, as well as the relationship with specific threats such as weed encroachment varies between species and environments.

However, a key point is that carefully managed intermittent grazing by travelling stock, as traditionally allowed in routes under public management is more compatible with conservation than long term or permanent grazing as practised on most private land. Increasing the frequency or duration of grazing, to raise income, is likely to be incompatible with conservation.

# Retention of the Travelling Stock Route Network is critical for adaptation to the effects of Climate Change

Global climate change poses additional challenges for the survival of biodiversity. It is widely recognised that species' ranges will need to shift with climatic zones. This requires landscapes that are connected, allowing such movement to occur (Hoegh-Guldberg et al. 2008). NSW and Queensland are extraordinarily fortunate in this regard. We already have some of the required infrastructure in place to deal with climate change, in the form of the corridors of native vegetation in travelling stock and the rail reserve networks. Their public ownership makes it possible to conserve the native ground cover needed by many species using the corridors, and to revegetate gaps to contribute to the health of the entire landscape. Furthermore, the vegetation of the network forms a bank of carbon, helping to mitigate further climate change. The loss of this vegetation would further exacerbate climate change problems.

### The Travelling Stock Route Network is vital infrastructure for transporting grazing stock

The maintenance and protection of the Travelling Stock Route Network will safeguard future stock transportation needs to feed growing human populations in south-eastern Australia. Stock routes provide economically efficient alternatives for graziers to move their stock. These values will be greatly increased as the price of fuel increases substantially.

## Cultural Heritage values - safeguarding a national asset

Stock routes and reserves have important historical significance. Their value is best protected in public management. The Travelling Stock Route Network has been immortalised in the poetry by Banjo Paterson and others. Furthermore, they hold indigenous cultural values as many are likely to have developed from existing traditional pathways (Reynolds 1990; Byrne & Harrison 2004). Numerous early explorers used aboriginal trackers to navigate inland areas of Australia (Baker 1993, 1997; Kain 1991), and early pastoralists would often follow indigenous trails to find water (Kain 1991). Many of these routes later developed into the first roads and travelling stock routes in NSW and Queensland (Spooner 2005; Kerwin 2006), and hence some routes could be up to 40,000 years old.

As a result, the stock route network contains many sites of archaeological and shared cultural significance, including scar trees, ceremonial camping grounds, government survey trees, fences, dams and other historic structures. Easy access to these sites along the routes is essential to indigenous people seeking to maintain cultural connections to their land.

#### Social and economic value

The original NSW declaration of stock routes (about 1830s) stated that their purpose included "...for the travelling public". That still holds today with the native vegetation along the stock routes giving the landscape its uniquely Australian scenery that is appreciated so much for its tourism and recreational values.

The Travelling Stock Route Network supports social activities such as horse riding, bird watching and recreational fishing, while providing access corridors linking isolated areas of the state and benefiting rural communities with utilities and other services (McKnight 1977; Rural Lands Protection Boards, undated). They additionally provide jobs in Local Governments and Rural Lands Protection Boards as well as in industries such as tourism and apiary, in addition to droving.

### The threat to these values

In a recent review investigating the structure of the NSW Rural Lands Protection Boards it was recommended that non-profitable sections of the network be ceded to the Department of Lands (Integrated Marketing Communications 2008 p. 9).

This approach would greatly increase the likelihood that sections of the network are sold or subject to long-term lease. This approach fails to recognise the need to protect, manage and restore the diverse values of the network described. It also occurs without sufficient information on the complete ecological functions of the network. It is likely that the generally good condition of the network under the stewardship of the local rangers will be lost.

In Queensland, it has been announced that none of the network will be sold (Queensland Department of Natural Resources and Water 2007). However, the proposed separation of the network into 'active' and 'inactive' routes, may allow long term agistment with continuous grazing. This approach does not recognise the integrity of the network as a whole, nor the superior condition maintained in areas with careful publicly managed intermittent grazing.

### The future of 'The Long Paddock'

An opportunity exists for State and Commonwealth Governments to show leadership in public management of the network. This national asset has environmental and heritage values as well as providing increasingly critical support to livestock industries. Taking care of the Travelling Stock Route Network is vital for both people and the environment across NSW and Queensland.

A. a. Mix

Professor Hugh Possingham FAA (DPhil, Oxon)

Emeritus Professor Henry Nix AO

For and on behalf of the following scientists on the attached list who are signatories of the Statement.

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