The Stock Routes Coalition

The Stock Routes Coalition is a group of organisations who have come together to have the NSW and Queensland Stock Routes declared 'Protected Corridors for Travelling Stock and Biodiversity', managed by the current managers and adequately resourced with supplements from public funds.

Members:

Birds Australia (BANQ , BAC, BASQ, BANN, BASNA)
Bird Observation & Conservation Australia (BrisBOCA)
Birds Queensland
Camooweal Drovers Camp
Chinchilla Field Naturalists Club
Citizens Wildlife Corridors Armidale
Droving and Stock Routes Association
Freshwater Fishing and Stocking Association of Queensland
North Burnett Landcare
National Parks Association of NSW
National Parks Association of Qld
Nature Conservation Council NSW
Noosa Parks Association Inc
Qld Naturalists Club
Queensland Regional NRM Groups Collective
Ravensbourne and District Landcare
South West NRM Ltd
Tamborine Mountain Natural History Association
Tamworth Birdwatchers
TSR Future Unlimited - Mates of the Stock Routes
Toowoomba Field Naturalists Club
Applied Environmental Decision Analysis (UQ)
Wagging Dog Productions
Wildlife Preservation Society of Australia
Wildlife Preservation Society of Qld

Supporters:

A number of other organisations have indicated support of the aims of the group, including
Australian Conservation Foundation
Charles Sturt University Institute of Land Water and Society,
Qld Conservation Council
Wilderness Society .
WWF- Australia

Stock Routes Coalition Save Our Stockroutes

Values of the Stock Routes

The Stock Routes in New South Wales and Queensland have many values

INTRODUCTION

For the most part, stock routes were set aside from private ownership before the large scale phases of land clearing at the time of first land survey during the period 1840 – 1880. The network of stock routes was established to facilitate the movement of livestock by walking and grazing between properties and to markets. They were given sufficient width (much wider than a single purpose road reserve) to contain enough grazing to sustain walking stock and a paddock (Camp and Water Reserve) with water at about every 16 km of linear distance. Legislation and Regulation established management rules and management was divested by the States to regional authorities, currently, Rural Land Protection Boards (RLPB) in NSW and Local Government (LGC) in QLD. Traditionally, maintenance of the networks was self funded from fees charged to users; more recently, fees have been insufficient. Management has been effective.

The pattern of stock route use has been one of periodic grazing; relatively short, infrequent periods of intense grazing interspersed with long periods of light or no grazing. Stock could not walk the stock routes unless both pasture and water were present. Consequently, prolonged periods of overstocking have been avoided. One hundred and fifty years of these circumstances have favoured the native vegetation and today, the stock routes contain good examples of Australian vegetation and with their design as a continuous network they facilitate the maintenance and distribution of many native life forms. It follows that the stock routes today contain wildlife conservation values not originally envisaged. These conservation values are of national significance.

In recent years the community has become more aware of the threats from climate change to Australia's rural environment. Climate change is already disrupting the ecology of diverse groups of fauna and flora around the world and changing the seasonal breeding patterns of birds and insects for example. As the rate of climate change accelerates in future decades it will displace species from their current habitats and pressure them to move to track their climate preferences. Although Australia has a target of reserving 10% of each type of ecosystem, this policy needs to be supported by the provision of corridors of high quality vegetation to allow species to move across the fragmented and heavily cleared landscape. While rivers and forested mountain ranges provide corridors for some species, the stock routes provide a vast network across both NSW and Queensland. They also have the advantage of lying along environmental gradients in all directions. The stock routes provide a fortuitous opportunity to assist endemic species in the eastern states to adapt to climate change.

Modern transport and better roads have reduced the use of the stock routes for travelling stock which, in turn, has reduced the revenue stream forcing the responsible managing authorities to modify the pattern of use to increase revenue and to seek to rationalise the networks in order to reduce the area of their responsibility. Both the proposed changed pattern of use to continuous agistment of inactive sections of the SRN and reduction of the TSR are threatening the values so fortunately delivered from the past.

THE VALUES:

To quote from Queensland Stock Route Network Management Strategy 2006-09 (NRW 2007):-

- The relevant roads and reserves that make up the stock route network represent a range of natural resources embodying cultural heritage, recreational, environmental, biodiversity and economic values (at page 4, par 2) .....they can be identified at different levels: (1) values associated with the land, and (2) values uniquely associated with the SRN and stock route activities. (at page 7 par 2).

Values associated with the land

- economic values associated with the high pastoral productivity of the land to meet the needs of travelling stock, as well as economic benefits to rural communities through having corridors of land to transport goods and services to and from these communities
- environmental values associated with rich biodiversity, riparian areas and aesthetics, as well as value as a corridor linking areas of natural vegetation which allows for wildlife movement across the landscape (including ecoservices to adjacent agriculture and grazing industry)
- cultural values associated with indigenous trade routes and sites of archaeological and cultural significance
- social values associated with use of the land for purposes other than stock route activities such as horse riding or recreational fishing, providing access corridors linking isolated areas of the state and benefiting rural communities with utilities and other services.

Values associated with the SRN and stock route activities

- cultural and historical values associated with SRN activities such as sites of stock route facilities; family and personal connections to certain stock routes for both indigenous and non-indigenous peoples; and intrinsic cultural values associated with the simple existence of the stock route network and its linkage to exploration and settlement
- economic values associated with providing employment to drovers and providing more economical alternatives for moving stock

- environmental values associated with the benefits to the environment from walking stock as opposed to trucking or transporting by rail (eg reduced emissions)
- social values associated with employment opportunities in the droving and pastoral industries as well as local governments. (at page 7) (NRW 2007)

Values enhanced by the historical pattern of use of the stock routes

- "The survey also found that the reserves contained a diversity of important flora species – and that some of the reserves were considerably more floristically diverse compared to adjacent farmland, especially in terms of the native grasses and forbs. There are three explanations for this. First TSRs have historically experienced periodic grazing with rest periods in between the sometimes intense grazing events (rather than the "set stocking" usually practiced on private land which allows no rest period and can deplete palatable species). Second, to the best of our knowledge there has been no fertilizer use on TSRs. And third, they have never been ploughed for crops."(Davidson, Scammell et al. 2005)
- "TSRs are long transects covering many climates and soil types, a unique sample of our biodiversity. ... TSRs are often the nearest source of local provenance seed suited to a particular soil and climate."(Metcalfe 2004)
- "Many TSRs are structurally complex and support bird species that do not occupy extensively cleared and intensively grazed landscapes. All the TSRs are relatively large and support a wide range of birds that do not occupy small patches (less than 10 ha) of native vegetation. Many TSRs are long and likely provide important corridors for the movement of animals and plants. Most importantly, TSRs occur across a wide range of vegetation types on a wide range of soils and slopes. This combination of size, connectivity, structural complexity and vegetation diversity supports an extraordinary range of birds, including many that are rapidly disappearing from the agricultural zone of NSW."(Freudenberger and Drew 2001)

Values enhanced by the pressures of climate change

- Stock routes are continuous and incorporate a variety of local landform and vegetation types, and watering points, whereas other types of reserves are discontinuous and tend to be targeted to a specific landform or vegetation. Stock routes often contain fertile soils 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 potential corridors which could facilitate the movement of species in response to shifting climatic zones.
- 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 can't be fully realised and this has importance in terms of climate change - the value of the whole network is greater than the sum of the value of the individual parts.
- The stock routes provide the Australian community with valuable opportunities to rejuvenate the inland by building environmental infrastructure, such as fencing to rehabilitate the vegetation; to encourage ecotourism; and in degraded sections to store carbon in order to mitigate climate change while supporting regional communities..

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Sustainable Grazing

Minimum Standards for Sustainable Grazing

Light and intermittent grazing by travelling stock has ensured that the native vegetation is mostly in reasonable condition and that reservoirs of native seed persist.

The Log of Claims includes the following statements:

- Permit only sustainable intermittent grazing under Annual Grazing Agreements……
- .... the proposed legislation should establish enforceable minimum standards for sustainable grazing ..

This paper endeavours to define our meaning and to propose minimum standards.

Definitions

- sustainable grazing: a regime of domestic livestock grazing that maintains an equilibrium of vegetation diversity over time.
- sustainable intermittent grazing: a regime of domestic livestock grazing that maintains an historical equilibrium of diversity of native vegetation over time and includes a phase of livestock withdrawal during part of the vegetative growing season with adequate rainfall of one year or of one in every few years.
- minimum standard: a statement of a condition which must be exceeded. eg: In the context of grazing a minimum standard could be expressed as a pasture yield number.

Grazing Standards

The literature and corespondents agree two essential elements for a sustainable grazing regime: – there must be condition assessments and a grazing strategy devolved from the assessments. (Henry, D. R., Hall, T. J. et al. 1995; McIntyre, S., McIvor, J. G. et al. 2002; Lunt, I. D., Eldridge, D. J. et al. 2007; Cowley, R. A., Blomfield, C. M. et al. 2008; Hamilton, J. S., Chilcott, C. R. et al. 2008; Spooner, P. G. 2008; Spooner, P. G. and Briggs, S. V. 2008)

A system of assessment and grazing is currently in use and is suitable for adapting to the SRN.

Grazing Land Management

Four of the above references refer to methods for assessment of pasture and the calculation of a sustainable consumption of dry weight of available pasture. (Henry, D. R., Hall, T. J. et al. 1995; McIntyre, S., McIvor, J. G. et al. 2002; Cowley, R. A., Blomfield, C. M. et al. 2008; Hamilton, J. S., Chilcott, C. R. et al. 2008)

These methods are in use in Queensland and elsewhere in northern Australia and from which a sustainable grazing regime for the short (seasonal) and long term (years to decades) can be determined. They form the basis of the Meat and Livestock Australia Limited Grazing Land Management workshops operated by Queensland Department of Primary Industries and Fisheries. The Stock Routes Coalition proposes that both the method of assessment and the percentage of safe pasture consumption are capable of application to the SRN through the Regulations to a Stock Routes Act.

Compliance will involve removal of no more than 10-30% of standing (ungrazed) biomass depending on the rainfall zone, and intermittent (at least every 2 - 4 years) 'wet season spelling' of the vegetation to allow replenishment of root energy stores and hence persistence and regeneration of perennial grasses and forbs. Such a grazing regime should also enhance the protection of vegetation in different levels of the canopy, not only grasses and trees.

The Grazing Land Management Workshop should be a basic training requirement for SRN rangers and the operators of Annual Grazing Agreements. The course is likely to be capable of adaptation for assessing regulated standards.

Application to the SRN

The SRN will have two different grazing situations where the application and enforcement of standards will need to be somewhat different.

1. Travelling stock

The onus would be on the shire SRN officer who may not issue a permit unless the minimum vegetation standard is assessed and found to be exceeded. The issued permit should contain conditions of movement that ensure the stock do not deplete the feed resource below the minimum standard.

2. Annual Grazing Agreement

The onus should be on the AGA applicant to make an assessment (and provide the detail) and to present a Management Plan for the AGA period showing how the grazing will be managed so as to exceed or meet the minimum standard. The section of SRN that is subject to AGA is subject to official assessment at any time and subject to forfeit if the Management Plan and or the terms of the AGA are not being met.

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Top

the STOCK ROUTES COALITION

44 Emu Creek Road Crows Nest Qld 4355

Submission to Land Tenure Inquiry

3 August 2012

At the public briefing held by the State Development, Infrastructure and Industry Committee on Wednesday, 11 July 2012, no mention of the Queensland Stock Route Network of Stock Routes and Reserves (SRN)

This is surprising for a number of reasons:

- the SRN comprises some 2% of the land area in Queensland
- the large amount of work done by Government, industry and conservation groups to reach consensus on the proposed Stock Route Network Management Bill 2011
- the direct relevance of the values of the SRN to the Terms of Reference of the enquiry

Values of the Stock Route Network

- They provide a valuable service to travelling stock, as well as an emergency drought refuge. With steeply rising fuel prices their use is likely to increase again.
- The light and intermittent grazing by travelling stock has ensured that the native vegetation is mostly in reasonable condition and that reservoirs of native seed persist. Biodiversity values have thus been conserved.
- Many stock routes cross cleared agricultural and pastoral landscapes and provide habitat for flora and fauna lost from the surrounding areas. The only surviving examples of some Regional Ecosystems are on stock routes.
- In many places they are the only source of connectivity in the landscape, providing corridors for the movement of wildlife and plants.
- Stock routes incorporate a variety of local landforms, and vegetation types. Stock routes often contain fertile soils and much greater biodiversity than adjoining private grazed or cropped land.
- Some flora and fauna are likely to be adversely affected by climate change. Stock routes provide east-west and north-south corridors for these species west of the Dividing Range.
- The iconic Long Paddock also has cultural values associated with indigenous trade routes and sites of archaeological significance. Both indigenous and non-indigenous peoples have family and personal connections to certain stock routes. Stock routes have links with exploration and settlement.

Relevance to land tenure

The Stock Route Network must be managed to protect all of these values, some of which have relevance to issues noted in the public briefing. For example, they provide sites for active recreation including camping, fishing, bushwalking, 4 wheel driving, birdwatching and other forms of ecotourism.

While there are sections with greater value than others for stock movement, biodiversity, etc., the network needs to be seen a single entity whose sum is greater than its parts. It provides a unique network of corridors which facilitate the movement of native animals and plants. This has special significance for the survival of species under climate change.

All of the Stock Route Network should be retained in state ownership to facilitate control of compliance with management rules, and to simplify increased use by travelling stock in the future if the prediction of peak oil and escalation of road transport costs eventuates.

If parts of the Stock Route Network not used for their primary purpose of travelling stock are leased for grazing, this should follow the principle of cell grazing (intermittent grazing) to ensure sustainability. .

Yours sincerely,

Grahame Rogers, Secretary..

The Stock Routes Coalition is a group of organisations who have come together to have the NSW and Queensland Stock Routes declared 'Protected Corridors for Travelling Stock and Biodiversity', managed by the current managers and adequately resourced with supplements from public funds. (For more information see www.stockroutes.info)

Log of Claims

The Stock Routes Coalition Log of Claims (Queensland)

Our Aim: Protected Corridors for Travelling Stock and Biodiversity Conservation

Preamble

The Stock Routes Coalition acknowledges that the current Government has advised that in Queensland none of the network will be sold or leased. The Stock Routes Coalition is aware that the Government is working on stand alone legislation and improved management of the stock route network. In the interim the Coalition would welcome a moratorium by Government on the issuance of any additional permits or management arrangements over the stock routes network. It is acknowledged that Local Authorities have been devolved certain powers and the Stock Routes Coalition encourages the Government to request local authorities to comply with any moratorium initiative by Government.

Broad Principles

- The Stock Routes network is not disposed of, leased or long-term agisted in part or whole nor further fragmented.
- Rehabilitation of vegetation occurs where necessary.
- All values including meeting the needs of bona fide travelling stock, biodiversity, Aboriginal heritage and cultural values, post settlement heritage, social and tourism must be protected.
- On active stock routes that support high conservation or Aboriginal heritage and cultural values these must be protected while accommodating the needs of travelling stock.
- Allow only sustainable intermittent grazing.
- Other activities that contribute to the wise and sustainable management of the stock route network while conserving all values may be supported depending on the situation and details.
- The role of the Stock Route network in mitigating against and adapting to Climate Change be acknowledged and incorporated into relevant State plans.
- The network must be able to accommodate increased use which may result from rising fuel prices from peak oil and carbon trading.
- Support for the development and enactment of stand alone Stock Route legislation.

Legislative Requirements

- The objects of the Act to include accommodating the needs of bona fide travelling stock as the primary purpose except where other values are more significant. Other values may include but not necessarily be limited to protection of biodiversity, Aboriginal heritage and cultural values, post settlement heritage and tourism.
- The need for an accountable, understandable and transparent process to declare active and inactive components of the stock route is stipulated in legislation. That process is to be enshrined in regulation.
- Areas of high conservation value to be protected by tenure that enables such lands to contribute to the protected area estate.
- Head of power in the Act for the State Government to make a plan for the entire network enforceable by regulation
- Provide revenue opportunities from use of the stock route network.
- Ensure appropriate penalties and disincentives for non compliance with legislation.
- Local Governments, where required, produce management plans adopting as a minimum the standards set in the State plan.
- Ensure Local Governments have the powers to deal with breaches of regulations and plan for both biodiversity and heritage protection.

Stock Route Assessment Panel (SRAP)

- Current Terms of Reference be expanded to address management of all values of the Stock Route network.
- SRAP must be expanded to include persons with expertise on all the values of the network particularly conservation/environment and Aboriginal cultural heritage.

Funding

- The Stock Routes Coalition supports the user pays concept. All users must contribute financially to the management of the stock route network and should not gain a financial advantage from use of a public utility at no cost.
- Other sources of funds to manage values of the network other than those associated with the grazing industry must be explored.
- Support for the use of public funds including consolidated revenue for fencing of unfenced SRN if appropriate, and maintenance of public good values.
- Local Authorities should not be required to meet shortfalls in management costs of the stock route network provided that the Local Authority is managing the network in accordance with an approved management plan that satisfy standards set in the State Plan.

Endorsed by Stock Routes Coalition August 2009.

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

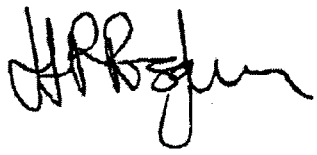
In a recent review investigating the structure of the NSW Rural Lands Protection Boards it was recommended that non-profitable sections of the network be ceded to the Department of Lands (Integrated Marketing Communications 2008 p. 9).

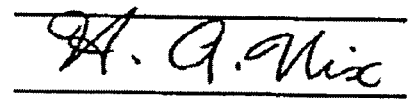
This approach would greatly increase the likelihood that sections of the network are sold or subject to long-term lease. This approach fails to recognise the need to protect, manage and restore the diverse values of the network described. It also occurs without sufficient information on the complete 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.





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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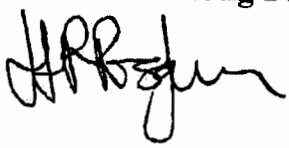
Signatories of the Long Paddock Scientists' Statement

27 August 2008

We, the undersigned scientists support and endorse the Long Paddock Scientists' Statement



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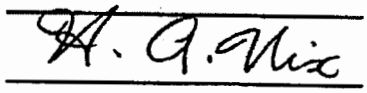

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Peter-Jon	Waddell	BSc(Hons), PGDip
Alan	Wade	DipAppSc, BSc, PhD
Sarah	Wain	BAppSc
Joe	Walker	PhD
Julian	Wall	BNatRes(Hons), PhD
Arian	Wallach	BSc, MSc
Terry	Walshe	BForSc, PhD
John	Ward	PhD
Glenda	Wardle	BSc, MSc, Ms, PhD
Alexander	Watson	BSc, PhD
James	Watson	BSc(Hons), DPhil
Penny	Watson	BSc, MEnvMgmt, PhD
Richard	Watts	PhD
Jessie	Wells	BSc(Hons)
Margaret	Wheeler	PhD
Jennie	Whinam	BSc(Hons), PhD
Robyn	Whipp	BSc./BForSc.(Hons)
Desley	Whisson	PhD
Andrea	White	BSc (Hons)
Sian	Wilkins	BEnvSc(Hons)
Kristen	Williams	PhD
Moira	Williams	BSc(Hons), PhD
Nicholas	Williams	BA, BSc, PhD
Peter	Willis	BSc (Hons), PhD
Kerrie	Wilson	BAppSc(Hons), PhD
Andrea	Wilson	PhD
Brendan	Wintle	PhD
John	Wischusen	BSc, GDipAppSc, MSc, PhD
Isabelle	Wolf	Diplom-Biologist
Nathan	Wong	BSc(Hons)
Jodie	Wood	BSc(Hons)
Graeme	Worboys	PhD
Wendy	Wright	BSc(Hons), PhD
Yalmambirra		BAppSc(Hons), Wiradjuri elder
Alice	Yeates	BSc(Hons)
Kara	Youngentob	MSc
Alek	Zander	PhD
Frank	Zich	BAppSc