

September 2019

# Village Eco News

A publication of Bangalow Land and Rivercare.

## On Dangerous Ground: land degradation is turning our soil into deserts

Last summer we saw repeated dust storms blowing precious top soil from western NSW towards the coast. If any of us still has the slightest doubt that we are facing an ecological crisis on an unprecedented scale, then a new report on land degradation, released by the *Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services* (IPBES), provides yet another piece of evidence.

Land degradation can take many forms. Its impacts can be far-reaching, including loss of soil fertility, destruction of species habitat and biodiversity, soil erosion, and excessive nutrient runoff into lakes. Climate change, especially where droughts and forest fires are becoming more frequent the problem is growing rapidly.

The two most significant direct causes of land degradation are the conversion of native vegetation into crop and grazing lands, and unsustainable land-management practices.

Other factors include the loss of land to urbanisation, infrastructure and mining.

However, the underlying driver of all these changes is rising per-capita demand from growing populations for protein, fibre and bioenergy. This in turn leads to more demand for land and further encroachment into areas with marginal soils.

Market deregulation, which has been a global trend since the 1980s, can lead to the destruction of sustainable land management practices in favour of monocultures, and can encourage a race to the bottom as far as environmental protection is concerned.

The vast geographical distance between demand for consumer goods and the land needed to produce them, between in other words, the cause of land degradation and its effect makes it much harder to address the problem politically. *continued over*



Dust storm in western NSW

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### Landcare Working Bee

Our team of friendly volunteers work every Saturday morning, weather permitting from 8.30am to 10.30am rotating through the various sites around Bangalow. All welcome.

On the positive side, success stories in land management are well documented: agroforestry, conservation agriculture, soil fertility management, regeneration and water conservation.

In fact the economic case for land restoration is strong, with benefits averaging ten times the costs, even when looking at very different types of lands and communities of flora and fauna. A common feature of many of these success stories is major involvement by indigenous populations and local farmers.

And yet these achievements remain far short of the scope of the problem. Significant obstacles remain – including, increasing demand for land, lack of awareness of the extent of land degradation, fragmented decision-making and increased costs of restoration as time goes by.

What can we do as citizens? The most obvious action is to eat less meat and, more generally, to inform ourselves about the sources and impacts of the food we buy – including its packaging, fuel and transport.

But the problem is not just about individual choices, important as these are. Underlying systemic causes need to be addressed, including lack of protection for local communities powerless to resist global market forces, ideologies of unfettered growth and perverse incentives for more consumption.

*Source The Conversation*



**Degraded farm land**



## **Recycled Plastic ‘Sleepers’**

Railway tracks at Victoria’s busy Richmond Station will receive 200 railway sleepers made from recycled plastic as part of an 18-month trial, in an effort from the Victorian Government to address waste.

Produced in Mildura by Integrated Recycling, the Duratrack sleepers, being laid above, are made from a mix of polystyrene and agricultural waste, including cotton bale wrap and vineyard covers all sourced in Australia.

The recycled sleepers have a potential lifespan of up to 50 years, are half the cost of traditional timber sleepers and require far less maintenance. For every kilometre of track installed, 64 tonnes of plastic waste that would otherwise have gone to landfill will be recycled.

The ground-breaking product is the result of more than two years of research and product development led by Integrated Recycling and Monash University, with the sleepers already up and running at four Victorian tourist railways including the iconic ‘Puffing Billy’.

Victorian Minister for Energy, Environment and Climate Change, Lily D’Ambrosio, said, “This marks a significant milestone as Victoria embraces innovation in the recycling industry. We’re embracing new technology to tackle the problem of plastic pollution in our community”.

*Source: The ABC*



## The Importance of Native Pigeons

Crested Pigeon (left), Brush Bronzewing (centre) and Pied Imperial-Pigeons (right) are amongst the 22 species of native pigeons and doves in Australia. Their charm and beauty belies the important functions they play in ecosystems as they forage for and disperse seeds and concentrate nutrients in the environment. The region's tropical rainforests depend on them for tree diversity along with the White Headed Pigeon (below left) and Rose-Crowned Fruit Dove (below right).

The future of Australia's native pigeons however, may depend on our domestic pigeons both feral and captive. In recent years, two infectious diseases have been found to affect our captive domestic pigeons: the pigeon paramyxovirus type 1 (PPMV1) and a new strain of the pigeon rotavirus (G18P).

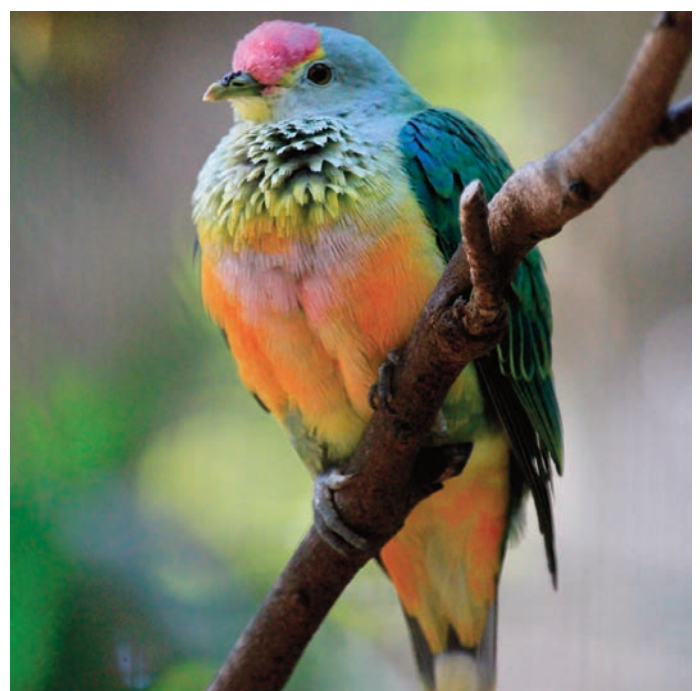
The risk is that these viruses will establish in feral pigeon populations and cause epidemics in our diverse and ecologically important wild native pigeons.

Fortunately, neither has crossed over to Australia's native pigeons yet if they did we could see catastrophic population declines across numerous native species in Australia over a very short period of time.

Such a nightmare scenario can only be avoided by predicting if and how these viruses might "spill over" so that we can prevent this in the first place. Agricultural poultry is routinely screened to check their vulnerability to threats like the PPMV1 and G18P. For our native pigeons and doves however, no such similar testing is planned.

The threat to our native species can be actively managed by improving our biosecurity and vaccination programs for captive domestic pigeons, and eradicating feral domestic pigeons. The protection of our native pigeons however, ultimately relies on valuing and understanding their ecosystem functions in the first place.

Source A. Peters Senior Lecturer Charles Sturt Uni





## What a Difference Three Years Makes

Top: This photo was taken in April 2016 of the Bangalow All Souls Church Stage 2 community planting day. Sixty people came along to help Bangalow Landcare and Rous Water to plant 3500 trees over a 1 hectare area.

Bottom: The same area photographed in August this year. A very popular 'Riverwalk' now winds through the trees and along Byron Creek joining the Bangalow Waterfront with the Sports Fields.

### *Village Eco News*

Our aim is to inform, interest, amuse and educate our readers on all things environmental. We welcome you to submit your contributions or to subscribe to this free Newsletter send your name and email address to:

[bangalowlandcare@gmail.com](mailto:bangalowlandcare@gmail.com)

Please pass this publication on to your family and friends. Receiving our Newsletter online will help to save the environment we work to preserve.

editor, design and layout, Dawn Lotty



**Contact Details:**  
**President: Noelene Plummer 6685 4470**  
**Secretary: Liz Gander 6687 1309**  
**Email: [bangalowlandcare@gmail.com](mailto:bangalowlandcare@gmail.com)**  
**[www.bangalowlandcare.org.au](http://www.bangalowlandcare.org.au)**

