



NATURAL RESOURCE MANAGEMENT case study

Valuing our riparian assets

Auscott's Midkin property at Moree has a long history of environmental and riparian management. It's been 14 years since work on the regeneration of riparian areas was initiated at Midkin back in 2001.

Bordering the Carole Creek, riparian areas cover almost a quarter of the property - approximately 24 per cent of total acreage (pictured overleaf).

The method of regeneration was to cease dryland farming and grazing in areas close to the creek, to allow the country to rejuvenate naturally. However in the first four years, slashing and spraying of non-native grasses and weeds was required to promote the regrowth of native vegetation.

Recent research funded by the Cotton Research and Development Corporation (CRDC) shows that riparian soil seed banks in the areas now subject to regeneration, are dominated by weed species. However it appears that canopy cover and litter may play an important role in improving the diversity of regenerating native plants and assisting competition with weed species.

Some years after the regeneration program began, coolibah regrowth became so vigorous, selective clearing and mulching was required to encourage the reintroduction of other trees species and native grasses, as well as promoting a stand of coolibah of different age and size.

Auscott CEO Harvey Gaynor, who was Midkin farm manager at the time, says the approach to regeneration was to 'let nature take its course'.

"We tried to work with nature rather than recreating it," said Harvey.

"By leaving the land alone, it regenerated itself the way nature intended. We didn't plant any trees or grass, but allowed natural regrowth which occurred largely after a single flood event."

Riparian trees in dryland environments typically regenerate in pulses associated with flooding. Diverse age stands develop over time as dense stands of a single age group thin in response to further floods, and new seedlings establish.

"When necessary we tried to recreate nature as best we could, which led to the selective clearing of the coolibah to create diversity in the age, size and number of coolibah and other tree and grass species.

Pictured: Sean Boland, Auscott Midkin farm manager.



“We want to encourage a balance in our landscape of beneficial insects to aid our integrated pest management approach.

“And it’s not just insects, the value of birds and microbats for example were not really understood back when we started this work, but now we are more aware of how many different species can act as beneficial predators in our crops.”

Regeneration work on Midkin has made the natural riparian corridor on the property larger and healthier. This has, however, created some management challenges, such as a larger habitat for feral animals, in particular pigs, requiring intensive feral pig control efforts.

A case study undertaken with the Bugilbone Ridge Feral Pig Management Group in 2012 found that the most effective control method for feral pigs was through a coordinated approach between neighbouring landholders and local agencies. This strategy has been implemented utilising a range of control techniques including aerial shooting, baiting, trapping and ground shooting.

Increased vegetation along the creek has also led to an increase in wildlife, along with the problem of less visibility at creek crossings, with limited vision around road corners in this area. Safety procedures have been implemented to address these issue and resources targeted at maintaining staff safety in these areas,

with efforts including the erection of signage, grass slashing, and training staff to exercising caution with wildlife.

In the years since the regeneration initiative began, Harvey Gaynor says riparian management has become second nature to the Auscott team.

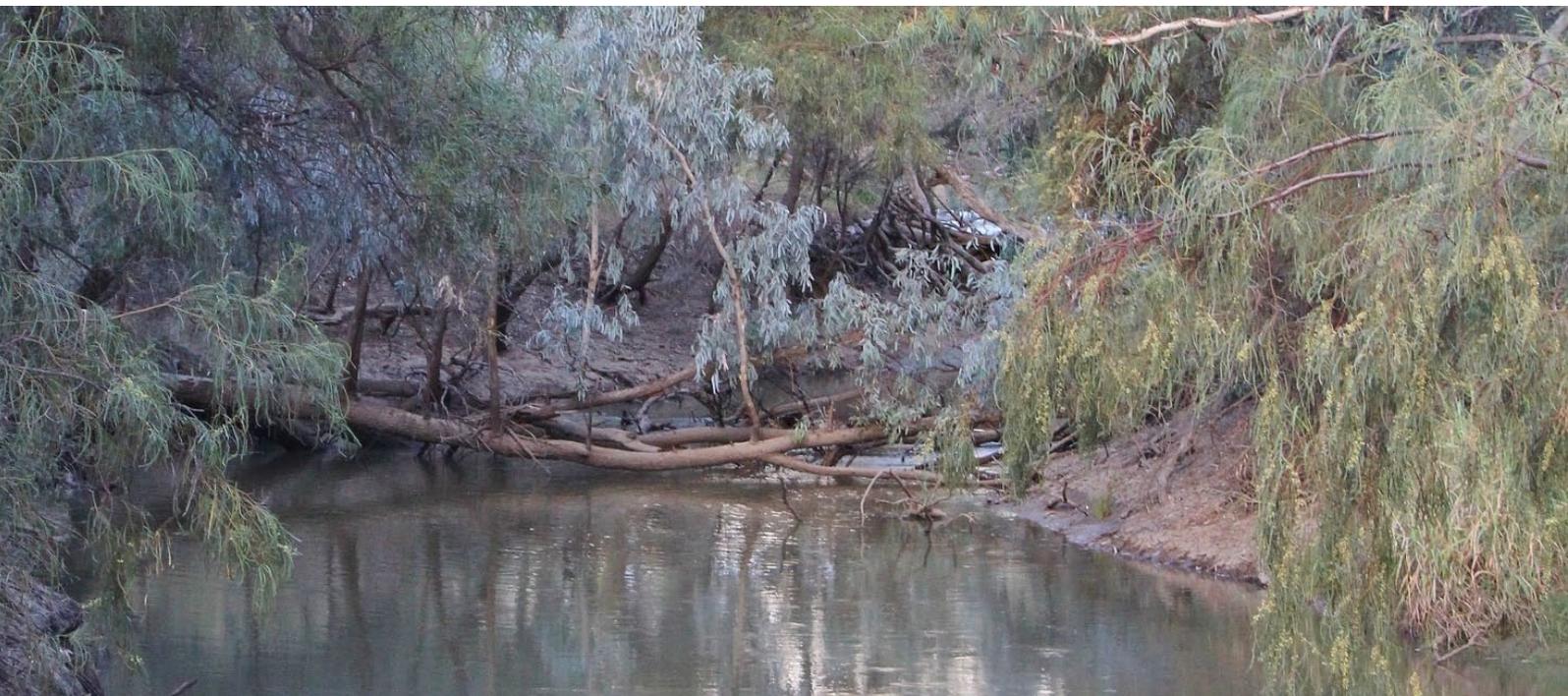
“We’ve certainly brought our farming back away from the creek bank and enlarged the area of riparian vegetation,” said Harvey.

“More attention is paid to anything that has a negative impact on or around the area, for example over grazing, cultivation, and the maintenance of roads running close to the creek which could lead to erosion.

“We may have to look at some more selective clearing of the regenerated areas in the future to promote a natural, healthy coolibah population. The areas are also constantly assessed and earthworks undertaken when necessary to stop gullies forming due to run off from paddocks.

“We still use biodegradable drip feed oils at our pumps sites along the river and fuel storages are bunded to prevent contamination of Carole Creek in the event of unforeseen leakage.

“Care of these areas has become a habit and second nature to our business, in line with our overall ethos of caring for the environment.”





Why is riparian health important to Auscott's business?

"We believe management and expansion of riparian areas is good for production in terms of IPM and has been beneficial for our bottom line," said Harvey.

"We didn't do this to comply with legislation. It naturally ties in with our ethos of looking after the environment around us - and it makes it a nicer place to work. The areas of planted vegetation also provide a buffer in the event of phenoxy drift damaging our cotton."

The staff at Auscott Midkin also have a long history of involvement with the research community and place a high value on participation in research projects. The farm has been the site of much research activity, in both the cotton fields and natively vegetated sites.

Over the years the riparian area has been accessed by a range of cotton industry researchers, including a study with the University of New England on the value of ecosystems services.

"We have always welcomed on-farm research as it is important to have research and researchers on farm. It is also for the betterment of the industry as a whole because the way we see it, what's good for the industry is good for Auscott and vice versa.

"We get to see first-hand the research results and understand them, which really helps develop staff knowledge and makes for better decisions about farming practices."

"It also puts our farm managers and staff in contact with really knowledgeable people who they can call on when needed, and helps identify knowledge and research gaps."

For more:

For more on Auscott's regeneration of riparian areas, contact:

- Harvey Gaynor - Auscott CEO
Ph: 02 9295 4800
Em: hgaynor@auscott.com.au

For more on natural resource management and the valuing of our riparian assets, contact:

- Stacey Vogel - CottonInfo Technical Specialist
Natural Resource Management
Ph: 0428 266 712
Em: staceyvogel.consulting@gmail.com
- North West Local Land Services
Moree - 02 6752 8012
Goondiwindi - 07 4671 0518
- Gwydir Valley Irrigators Association
Moree - 02 6752 1399

Or visit the CottonInfo website:

- Natural Resource Management page:
www.cottoninfo.com.au/natural-resource-management



458 Frome St, PO Box 1451, Moree, NSW 2400

