

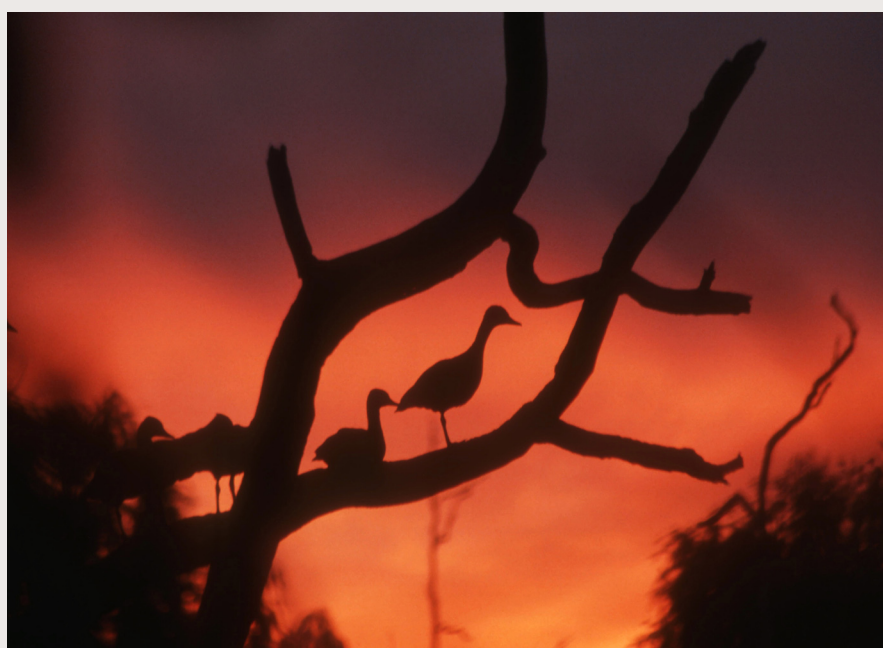
Nature's workforce



Biodiversity Series: How To | December 2008 Issue 12 | Produced by Cotton Catchment Communities CRC

Let nature do what nature does Supporting your natural workforce

Summarised here are some best management practises you can implement day to day on your farm to promote biodiversity and support your natural workforce. Once the hard work is done you can let nature take over and time take its course.



Ducks roosting at dusk, Wee Waa. Cotton CRC

In summary...

This fact sheet summarises the actions you can take to promote biodiversity on your farm. Even small management changes can make a big difference to the health of your soil, native vegetation, rivers and wetlands.

Treat your natural environment like another long yielding crop which will require some planning and thought. Nature has its own time schedule, once the right environment has been created, let nature do what nature does and then you can take it easy.

Helpful hints

- Allow natural processes to occur – it will take time.

- Manage grazing and fire to allow grasses and wetland plants to flower and set seed.
- Allow natural wetting and drying in lagoons and floodplains.

Benefits to the farmer

- A functioning and resilient ecosystem reduces management costs.

Are you making a difference?

- Monitoring helps you understand whether your actions are working and allows you to adjust your management to get the results you want (see Fact Sheet 5).



Cotton Catchment Communities CRC

Assess your farms resources

- Get an aerial view of your property to help you identify how to link existing remnants with vegetation corridors on your place and on neighbouring properties.
- Take a catchment approach - contact the local RLPB, catchment or NRM body, council or landcare group to see how to connect your farm with existing corridors such as travelling stock routes, road reserves, and other existing remnant vegetation on private and public land.
- Prepare a monitoring plan for your property - start with something simple perhaps concentrating on one natural resource management issue.

Good native vegetation management

- Protect and maintain blocks of remnant woodlands - it easier to retain, restore and revegetate existing native vegetation than to establish it from scratch.
- Leave fallen trees, branches and leaf litter in place and encourage a variety of vegetation in height, age and context.
- Keep old, dead standing trees with hollows – they provides habitat for native animals including insect-eating birds and bats which, in turn, can contribute to crop protection.
- Get to know the local, native trees, shrubs and grasses growing in your region and consider re-introducing species which are miss-



Swans and their young walking along an irrigation channel of a cotton farm.

ing in the native vegetation on your property.

- Maintain the grassy and herbaceous understorey through restricted grazing and controlling weeds in your native vegetation.
- Consider widening existing corridors, they should be as wide as possible (between 30 m – 400 m) and not longer than 1.5 km to gain maximum benefits for native plants and animals.
- Where it is not possible to have continuously wide corridors, the habitat value of narrow corridors can be improved by having larger areas of vegetation dispersed along the corridor.
- When developing corridors, try to match similar habitats with each other, for example consider establishing corridors between wetlands and the riparian zone.
- To conserve native grasslands leave some areas ungrazed or very lightly grazed as a seedbank and manage grazing or fire to minimise species loss to optimise production.

Good riparian management

- Plan your farm layout to keep riparian vegetation intact – riparian areas are biodiversity 'hot-spots'. A good riparian corridor can also protect valuable fields by filtering out the debris from floods.
- Fence the riparian zone and manage grazing pressure in these areas to allow the regeneration of understorey shrubs and young trees.
- Leave fallen logs and timber in your riparian areas (both on the ground and in the water) – snags left in the river provide food and shelter for fish and other aquatic species.
- Leave grassy buffer zones of at least 6 m between paddocks and riparian zone to filter sediment and prevent it from entering the waterway and reducing water quality.
- Provide off-stream watering points in grazing situations where stock have access to the river.

- Plant Bollgard® cotton next to water storages to reduce pesticide use near the water thereby ensuring water quality is suitable for native wildlife.
- Leave standing trees and fallen trees in water storages as perches for birds and habitat for aquatic animals and include islands to reduce wave action and under-cutting of storage walls.

Good wetland management

- Consider constructing buffer storages with a variety of slopes from steep to gradual, incorporating mudflats with shallow and deep areas - this mimics natural wetland areas and makes the storage more favourable to wildlife.
- Parts of your water return system could include a mixture of aquatic vegetation (water couch, knotweed/smartweed, phragmites) to filter the water and improve water quality before it is returned to the water storage.
- An island in the middle of the storage surrounded by a channel will help encourage bird breeding events as it provides a longer period of protection from predators such as foxes.



Sugar gliders roosting in a nest box. *Phil Spark*

For more information:

Web pages

<http://eied.deh.gov.au>

www.landwaterwool.gov.au

<http://www.environment.gov.au/land/publications/rangelands-fire/>

<http://www.epa.qld.gov.au/publications?id=843>

http://www.dpi.qld.gov.au/cps/rde/xchg/dpi/hs.xsl/26_6161_ENA_HTML.htm

http://www.cotton.crc.org.au/content/Catchments/Publications/Environment__NRM_Publications.aspx

<http://live.greeningaustralia.org.au/GA/NAT/TipsAndTools/exchange/>

<http://www.carbonsmart.com.au/> Landcare Carbonsmart

<http://www.namoi.cma.nsw.gov.au/>

Scientific Publications

Bradshaw, W. (2001) Critters & Crops: The critical connection. Greening Western Australia, Fremantle, WA.

Cotton Research and Development Corporation (2000) The Australian Cotton Industry's Best Management Practises Manual, 2nd edition.

Ford, G. and Thompson, N. (2006) Birds on Cotton Farms. Cotton Catchment Communities CRC.

Lindenmayer, D.B. and Hobbs, R.J. (eds.) 2007. Managing and Designing Landscapes for Conservation: Moving from Perspectives to Principles. Blackwell, Oxford.

Lovett, S. Price, P. and Lovett, J (2003) Managing Riparian Lands in the Cotton Industry Cotton Research and Development Corporation.

McIntyre, S, McIvor, J.G and Heard, K.M (2002) Managing and conserving grassy woodlands. CSIRO Publishing, Collingwood.

