

for a living planet°

## 5 THINGS YOUR BUSHLAND CAN DO FOR YOU



#### PROVIDE A WINDBREAK

Healthy bushland can provide great windbreaks around your farm, however to be effective at cutting the wind, all vegetation layers need to be present (especially shrubs). Managing stock access with a fence will provide better shelter in the paddock.

#### CONTROL INSECT PESTS

Bushland remnants support a number of insect-eating animals, which can help you out by eating the insects in your crops. While birds are best known for this, people often also underestimate the value of wasps, spiders and lizards in controlling pest insects.

## HELP FIGHT RISING WATER TABLES

Bushland is a natural, solar-powered water pump! It acts to keep water tables low in the area around the bushland, helping reduce the effects of rising water tables (and associated salinity). Trees, shrubs and grasses, plus the activities of animals in bushland soils all help water to penetrate the soil, reducing run-off to low-lying areas.

#### PREVENT SOIL EROSION

Bushlands help to prevent soil erosion by both wind and water. Roots, leaf litter and soils crusts protect the soil structure and allow water to pool and penetrate, while shrubs, trees and grasses slow down the winds that would otherwise blow soils away.





#### PROVIDE VALUABLE SEEDS

Remnant vegetation is increasingly valued for the quality of seed it harbours. There is a demand for native plant seeds for a variety of purposes, from native tree crops to ornamental plantings. Is there a patch of bush on your property that could provide seeds for a local revegetation or restoration project?

#### SO HOW DO YOU MAKE SURE YOU KEEP YOUR BUSHLAND WORKING FOR YOU?

You can take some simple steps to ensure the future of your bushland. Activities such as fencing, weed and feral control will go a long way to ensuring the future of your bushland in the short-term. To protect it in the long-term, perhaps you could consider some salinity control measures (if salinity is a threat) and giving it some legal protection through a voluntary conservation covenant.

This project is delivered by WWF-Australia as part of the Avon Catchment Council and Northern Agricultural Catchment Councils' NRM Investment Plans 2005-2008, with funding from the Western Australian and Australian Governments through the Natural Heritage Trust and the National Action Plan for Salinity and Water Quality programs.





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# 5 THINGS YOU CAN DO FOR YOUR BUSHLAND



Fencing off bushland to limit access by domestic stock is the first step in protecting it. Domestic animals graze shrubs and grasses, prevent recruitment of surviving trees and shrubs through compacting soil and eating seedlings, bring in weeds and give them a competitive advantage by increasing nutrient levels (through their dung) which allows the weeds to dominate the understorey.

#### CONTROL WEEDS

Weeds can out-compete native plants, choking out existing plants and preventing establishment of seedlings. They can also take over after disturbance events and increase fire risk. A healthy native understorey is the best defence against weed invasion, and minimising disturbance will help maintain this.

## CONTROL PEST ANIMALS

Rabbits are a significant pest animal for bushland, causing loss of understorey plants through grazing, soil disturbance, weed invasion and increasing nutrient levels. Pest animals, particularly cats and foxes, but also European Honeybees, Corellas and Galahs can also cause a lot of problems for the native animals that remain in bushland patches.

#### CREATE A BUFFER ZONE

To protect your bushland from windblown weeds and erosion you can create a buffer zone of low native shrubs around the bushland to catch the weed seeds before they can enter. For example dense plantings of tamma and broombush could be great for this purpose.

#### REVEGETATE BARE AREAS AND RECONNECT REMNANTS

Areas within your bushland that are bare as a result of historical rubbish dumping, overgrazing or clearing can be revegetated (using seed from the rest of the bushland). You can also revegetate to create corridors between existing woodland patches to allow small mammals, birds and insects to travel between them.

#### SO HOW DO YOU MAKE SURE ALL YOUR HARD WORK DOESN'T GO TO WASTE?

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# HOW DOES YOUR BUSHLAND RATE?









#### Near-pristine bushland Never accessed by stock

- · All layers of vegetation intact and fully functioning
- · Understorey rich in native grasses, small native herbs and delicate plants
- · Abundant and diverse birdlife any time of year, including rarely-seen birds
- · Diversity of other macro and micro-fauna
- · Soil structure intact, supporting many fungi species and other beneficial micro-organisms

Density of understorey shrubs means that fenced bush provides valuable, sustainable windbreak for livestock and minimises soil erosion and rising watertables in surrounding areas. Effects of insectivorous birds on insect pests around bushland would be quite noticeable.

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#### Largely intact remnant Occasional stock access

- · Most of the understorey and all of the trees remain intact
- · Small delicate native plants still evident, as are patches of native ferns, lichens, fungi and mosses.
- Native grasses abundant, though competing with weedy grasses in places
- · Small birds abundant most of year
- · Weeds noticeable only around edges and in a few small disturbed areas

The remnant still provides definite benefits with respect to managing watertables, preventing erosion and preserving soil structure. The remnant also contributes by encouraging pestcontrolling birds and small animals.



#### Disturbed remnant

#### Stock access for 5-20 years

- · Trees and mallees generally intact and quite healthy
- · Some understorey shrubs remain, but very patchy in distribution
- · Weeds not only dominate around edges of bushland, but noticeable throughout the remnant
- · Some leaf litter still present, some diversity of wildlife also noticeable
- · There may be evidence of soil erosion in bare areas within the bushland itself

Although thin in places, the fenced bush provides benefits to livestock in adjacent paddocks sheltering from wind. Bush still has value as livestock windbreak. however, if still unfenced, sheep have the tendency to shelter deep within the remnant during cold, windy or hot weather, thereby speeding up the degradation process. Trees, mallees and shrubs are still assisting to maintain balanced watertables and preventing soil erosion.

#### Heavily altered remnant Uncontrolled stock access for more than 20 years

- · Weeds have replaced understorey and are dominant throughout bushland
- · Shrubs have largely disappeared, with only some very old, tall shrubs remaining.
- · Most small native plants have long disappeared
- · Most native invertebrates and soil fungi have disappeared
- · Remnant is relatively devoid of fauna with the exception of "generalist" species such as Twentyeight Parrots and Magpies.

With disappearance of understorey and shrubs, the remnant has lost windbreak value for livestock, but trees still encourage important fauna species to roost and nest. The "patch of bush" has now become a "stand of trees" but it is still recoverable with long-term management, and still contributes in some ways to managing watertables and controlling soil erosion.

#### Final stages of decline Uncontrolled stock access for more than 50 years

- · Only oldest trees remain alive, and are showing signs of stress
- · All shrubs and understorey plants have long since disappeared
- No regeneration of native plant species for many years
- · Weeds well established and totally dominating throughout, they provide the only leaf litter within the bushland
- Soil is compacted and there are large bare areas with evidence of erosion

This remnant bushland has long since lost all potential windbreak value for livestock and for prevention of soil erosion, and has not provided habitat or feeding opportunities for insect-controlling fauna for decades. It contributes very little to watertable and soil management, and in the near future, will cease contributing altogether when only dead trees and weeds remain.