

## Key points on revegetation

When revegetating an area on your property to make it more suitable for bats it is important to consider the following factors:

### Is natural regeneration an option?

If you already have some remnant native vegetation or suspect there are still seeds in the soil, allowing and encouraging natural regeneration is the best and easiest option. Relieving grazing pressure, controlling feral animals and gradually controlling weeds with minimal disturbance techniques in remnant native vegetation will encourage regeneration of native plants. You may need to wait a couple of seasons, but you might be surprised at what comes up!

### What is already there?

Make sure you look carefully at the area you want to revegetate: you may already have some native species. Many native grasses, herbs and groundcovers are easily missed. If you have some native species adjust your planning and planting accordingly, i.e. if you have existing native grassland do not disturb the soil by scraping or ploughing the area for planting and avoid dense plantings.

### Plan your planting

By planning the location, design, species choice and techniques for revegetation you will be able to better meet the habitat requirements of bats.

### Choose plants native to your area

By selecting plants that would have grown in your local area, you will help restore some of the processes and associations that would have occurred naturally, such as seed dispersal and leaf litter accumulation. Local plant species are better adapted to local conditions and are most likely to provide natural habitat resources that the local fauna needs. Also, local plant species won't create a new weed problem.

### Get weeds under control

It is important to incorporate weed control into your revegetation management plan as weeds can undo all your good work by smothering young plants. Weeds change the natural structure of native vegetation and can make areas less suitable for bats.

## Biodiversity

Biodiversity is the variety of all living things and includes genetic, species and ecosystem diversity. Bats are an important aspect of our region's biodiversity and play an integral role in insect control, literally eating tons of insect each year. They are also an important food source for animals higher in the food chain such as native owls. By making your property bat friendly and increasing plant species diversity, you will benefit other native birds and animals and contribute to the overall biodiversity health of your region.

### Want more info?

Bats for Biodiversity, a community bat monitoring project is currently running in the South Australian Murray-Darling Basin region to improve our knowledge of local bat species. Landholders are encouraged to record the bat species active in their region by borrowing Anabat bat detectors. Community volunteers can also be trained to identify the bat species from the recorded bat calls. If your local Landcare or catchment group is not involved in the project, information can be accessed from the Natural Resources SAMDB Citizen Science Project Officer on 8391 7500 or visit [www.naturalresources.sa.gov.au/samurraydarlingbasin/get-involved/citizen-science](http://www.naturalresources.sa.gov.au/samurraydarlingbasin/get-involved/citizen-science)

For advice about managing and conserving native vegetation, contact your local Bush Management Adviser.

### References and Recommended Reading

<http://root.ala.org.au/bdrs-core/mdnrm/home.htm>  
<http://www.naturalresources.sa.gov.au/samurraydarlingbasin/get-involved/citizen-science/bat-monitoring>  
<http://root.ala.org.au/bdrs-core/mdnrm/home.htm> - Bat portal link  
<http://ausbats.org.au/>  
<http://www.midmurraylap.org.au/currentprojects.htm>  
<https://www.facebook.com/groups/783827098322693/?ref=bookmarks>

# How bat friendly is your property?



Interested in helping our native wildlife and attracting local bat species to your property? No matter how large or small your property, this worksheet will help you identify practical ways to make your place better for bats, and contribute to the community bat monitoring program.

Your property's vegetation and land management practices impact on bat foraging corridors, roost sites and food sources. By assessing your property and land management practices and comparing your current bat habitat with the ideal requirements of your local species, you will be able to identify steps you can take to become bat friendly and encourage bats to your property. You can also monitor change over time using an Anabat detector. By working together with neighbouring properties you can better address the habitat requirements of bats in your region.

### How to conduct your Bat Action Plan.

1. Work your way through the table on the next page and ask yourself the questions under the column **What is your current bat habitat?** Then tick the response that most closely matches the bat habitat you have on your property.

- Each response has a rating. If you scored less than the maximum number of bats, read through the **Bat Friendly Actions** to identify the steps you can take to improve your bat habitat and encourage bats to your property.
- When you have completed the table, tally up your bat rating results. How do you compare?
- Use the **Bat Action Plan** on the back page to list the future bat friendly actions you can introduce to your property. Specify a target date for each of these – and try and stick to this timetable.
- Contact your community monitoring officer (NRMSAMDB) to borrow a bat detector to record the calls of bats on your land; this way you can get a baseline species list for your property and continue to monitor annually to detect changes over time.

## Bat Action Plan

What you can do to make your property more bat friendly	By when	Tick When done
<i>i.e. plant understorey species under gum tree in backyard &amp; fence of creek.</i>	<i>End of year</i>	<i>✓</i>














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WHAT IS YOUR CURRENT BAT HABITAT?	YOUR BAT HABITAT			BAT FRIENDLY ACTIONS
	Not very bat friendly	Moderately bat friendly	Bat friendly	
Do you have a watercourse or dam nearby?	No, or yes but with no open water <b>0 BATS</b>	 <b>3 BATS</b>	 <b>7 BATS</b>	Bats need dams and creeks with open water for drinking. Many insects also need water for part of their life cycle, and often gather over water. This concentration of insect is an important food source and bats often forage over open water. Vegetation and reeds provide habitat for insects and also play an important water filtration role, trapping pollutants before they enter watercourses and providing cleaner water for bats. <b>Action:</b> By fencing off waterways to stop grazing and trampling of vegetation and undertaking appropriate revegetation you can encourage an increased diversity of insects on your property which will encourage bats.
Have you done any revegetation on your property?	No <b>0 BATS</b>	 <b>2 BATS</b>	 <b>5 BATS</b>	Bat activity is highest in areas with tree density similar to the vegetation structure before European settlement. A greater range of native shrubs and grasses provides for a greater diversity of bat species. Many bat species require adequate understorey cover for flight corridors, while all bats in the region are dependent on a diverse range of insect species for food. Many of our native moth and butterfly caterpillars live on native grasses. <b>Action:</b> Ensure any revegetation includes shrubs and native grasses. If necessary, improve the habitat in your revegetation by thinning out trees and adding some native shrubs, groundcovers and grasses.
Do you have scattered native trees on your property? (Include dead trees)	No <b>0 BATS</b>	 <b>2 BATS</b>	 <b>4 BATS</b>	Even single paddock trees provide vital roosting and foraging habitat for bats. Many insects gather near isolated trees providing an important food source. <b>Action:</b> To keep scattered trees healthy, encourage natural regeneration of understorey species by fencing around trees. This will also allow natural regeneration of replacement trees for future bat generations. Leave dead trees standing; they are essential for bat roosting sites.
Do you have a block of native remnant vegetation on your property or nearby?	No <b>0 BATS</b>	 <b>2 BATS</b>	 <b>7 BATS</b>	Remnant vegetation provides important roost sites, foraging corridors and food sources for bats. Natural bush is home to a wide range of insects which bats need for food. <b>Action:</b> By fencing off remnant vegetation to restrict grazing you will allow natural regeneration and improve the health of your bush. Controlling weeds and planting appropriate understorey species if necessary will provide a more diverse habitat and encourage a wider range of bat species.
Do you have any tree hollows / bark crevices or bat boxes?	No <b>0 BATS</b>	 <b>2 BATS</b>	 <b>6 BATS</b>	Bats need tree hollows and cracking bark as day roost sites. Bats have very specific roost requirements with height above ground, entrance size and cavity size all impacting on roost suitability. Some species change roost sites every night. By providing a greater range of roost sites you will encourage different species of bats to your property <b>Action:</b> Leave dead or old trees standing. Install bat boxes. Regular clearing of leaf and bark litter around the base of trees to protect them from wildfire.
Do your land management practices encourage healthy trees?	 Grazing / cropping & use of fertilizer beneath trees. <b>0 BATS</b>	 Trees are fenced off (i.e. in grazing paddock). Grazing & cropping pressure removed from beneath trees. <b>3 BATS</b>	 Trees are fenced off. No grazing or cropping beneath trees. Good regeneration / revegetation in fenced off areas under and around trees. <b>5 BATS</b>	Stresses such as stock and cropping affect the health of trees. By removing these stresses and allowing regeneration and appropriately revegetation with understorey species to condition the soil, trees are revived and put on new growth. Even if you have a lone gum tree in the backyard you can plant a 'garden' of native species around it to keep it happy. Healthy trees provide better habitat for bats, and the bats continue to help the trees by eating many insects that feed on the trees. <b>Action:</b> Fence off scattered trees and bush. Encourage natural regeneration and appropriately revegetate understorey species.
Do you use pesticides / herbicides on your property?	Regularly / broad scale. <b>0 BATS</b>	Sometimes / broad scale <b>3 BATS</b>	Never or rarely. Use is targeted. Minimal disturbance techniques are used for weed control. <b>7 BATS</b>	Bats are very susceptible to pesticide poisoning through drinking polluted water or eating contaminated insects. Insecticide use also reduces the bat's food source – insects. <b>Action:</b> Limit use of pesticides and herbicides. Use minimal disturbance techniques for weed control.
<b>HOW DID YOU SCORE?</b> Add up the total number of bats from the bat habitat assessment and give yourself a score out of 38. <b>TOTAL = 38</b>	<b>0-10 Not very batty!</b> Your property is not very bat friendly, however you have a great opportunity to begin changing that! There are a lot of things you can work on to improve your bat habitat. By looking at the suggested actions, make a list of things you can do in the bat assessment summary and you will be on your way to providing some of the essential habitat requirement for bats.			<b>11-19 You're on the right flight path!</b> Your property is already providing many essential bat habitat requirements. Try to look at your property from a bat's perspective: Do you have adequate understorey cover for foraging corridors? Are there enough roost sites of the right size and location? Is there a wide range of different plant species that will support a diverse range of insects for food? By working on a few aspects you will be able to more fully provide adequate foraging corridors, roost sites and food sources for bats in your region. Keep up the good work!
				<b>20+ Bats for biodiversity, biodiversity for bats.</b> Well done! The bat habitat on your property is very good. You may still be able to enhance a few bat habitat elements on your property. Remember: Different bat species have slightly different habitat requirements. A higher diversity of vegetation can support a higher diversity of insects and a higher diversity of bat species. How many different bat species do you have on your property?