



Help save the southern myotis (*Myotis macropus*)

Conservation status in NSW: Vulnerable

Commonwealth status: N/A

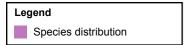
Saving our Species management stream: Landscape species

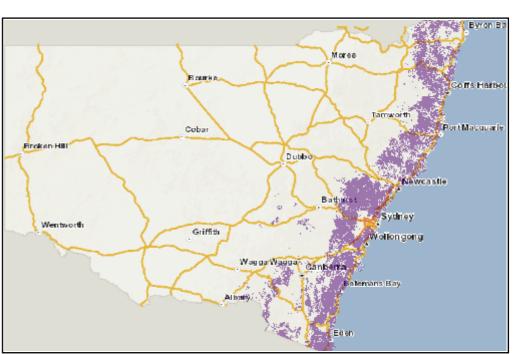
Species profile: http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10549

Saving our Species aims to conserve as many threatened species as possible. Experts have identified the distribution of the southern myotis and the critical management actions required to conserve the species in the long-term.

All conservation work being undertaken to conserve the southern myotis around the state is vital to its recovery. If you are carrying out critical management actions within the species' habitat, please contact us at www.environment.nsw.gov.au/savingourspecies/contactus.htm

Map of southern myotis distribution





Threats to this species are outlined at http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10549#threats

The actions listed in the action toolbox are supplementary to NSW legislation, policy and programs and can be used by stakeholders, where applicable, to guide management at a site, regional or state scale.

Action toolbox

| Action description | Scale |
|---|------------|
| Retain and protect live and standing dead trees likely to contain suitably sized hollows, or that have the potential to develop these in the future (e.g. through the loss of limbs) particularly in riparian zones. Ensure the largest hollow-bearing trees, including dead trees, are given highest priority for retention in property vegetation plan assessments. Offsets should include remnants in high productivity and riparian zones. Raise public awareness of the importance of hollow-bearing trees and promote strategies for retaining these in the landscape. | Area |
| Identify sites, particularly in riparian zones, where hollows are limiting due to exotic species inhibiting recruitment and changing the vegetation structure. Ensure the future replacement of large old trees by facilitating regeneration or undertaking replanting at sites where they presently occur. Protect recruit trees that will be able to provide hollows in the future. | Site |
| Liaise with the Roads and Maritime Authority and other relevant authorities and land managers regarding wooden bridges, wharves, tunnels, aqueducts and other structures acting as bat habitat. When undertaking any major works, replacing wooden bridges with concrete bridges or upgrading wharves, this be done at a time outside of the breeding (October-February) and overwintering period. A wooden structure should be placed under new bridges or wharves where bats are known to provide a roost. | State |
| Encourage land managers to enter into land management agreements that protect and restore key areas such as riparian habitat and including the retention of suitable hollow-bearing trees and recruitment trees in these areas. | Site |
| Check that in caves utilised by bats, entrances are not blocked in a way that prevents easy continual access by bats. Monitor the density of vegetation (native or exotic) at the entrance to any active or potential maternity or hibernation roost cave and manually remove (do not use chemicals) as necessary to ensure bats have ready access year-round. | Site |
| Discourage recreational users from roosting areas such as caves, culverts, and storm water drains by erecting signs or blocking preventing human access whilst still allowing access to bats. In caves where public access is permitted, restrict access during breeding season (November-March) and winter to approved management and scientific research only. Provide information to users in the form of brochures and signage about appropriate care and behaviour whilst at the site. Provide this information to caving, climbing, abseiling and bushwalking groups. | State |
| Liaise with relevant authorities and/or land managers to discourage the destruction of caves. If mine sites are to be closed or previously abandoned mines reopened, they should first be checked for the presence of bats (during summer) and access should still be provided for the bats to safely enter and leave. Closure technique should be discussed with relevant microbat experts to ensure that possible habitat for bats is maintained. If gates are used, they should be bat friendly with horizontal bars at least 15cm apart and preferably with a larger gap across the top. Bats should be excluded prior to closure (and this should not occur during the breeding season from October to February or in winter). The impact of closure on bat usage should be monitored for several seasons. | Site, Area |
| Promote roosting habitat in new artificial structures within the species' range and monitor their use. | Site |
| Raise awareness amongst landholders in close proximity (approximately 15km radius) to maternity or roost sites, of the potential impacts of using harmful pesticides and other chemicals and discourage their use in or adjacent to foraging habitat, particularly in riparian zones around waterways such as rivers, creeks, lakes and dams. | Site, Area |
| Liaise with agricultural landholders to promote land management that minimises disturbance to waterways likely to be foraging habitat (e.g. restore riparian vegetation and carefully manage stormwater and polluted run-off). Monitor and maintain adequate water quality in water systems known to be used for foraging. Liaise with relevant authorities with respect to limiting the impacts of waste disposal and runoff in these systems. | Site, Area |
| Control or remove exotic weeds, particularly in riparian zones, that degrade habitat and alter the structure of the vegetation community in areas of the species' distribution. Ensure that such weed control work be undertaken in a staged manner and minimises disturbance to the habitat of the species. Develop and implement a bush regeneration strategy (which includes monitoring and reporting requirements) targeting the removal of weeds significantly compromising habitat values such as the repression of future hollow-bearing trees. Care should be taken to avoid widespread removal of vegetation without replacement. Manual weed removal is preferable and the use of herbicides should avoid non-target impacts. Leave dead trees standing. Encourage land managers and bushcare groups to undertake weed control. | Site |
| Undertake restoration and augmentation planting and/or direct seeding, including species from the ground layer and understorey in areas of degraded and/or potentially suitable habitat particularly in riparian zones. Revegetation should focus on expanding existing smaller areas of suitable habitat and connecting areas of suitable habitat to create corridors for movement. A diversity of local native species should be planted. Dead trees should not be removed. | Site |

| Manually remove and appropriately dispose of invasive aquatic weeds in waterways in foraging areas (weeds | Site |
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| inhibit the species' ability to forage over water). | |

Are you helping to save threatened species?

Tell us about the work you're doing, and find out more about our program - visit http://www.environment.nsw.gov.au/savingourspecies.