



RECOVERY TEAM ANNUAL REPORT THREATENED SPECIES AND/OR COMMUNITIES RECOVERY TEAM

PROGRAM INFORMATION

Recovery Team	Woylie Recovery Team
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Reporting Period

Submission date 31 March

DATE FROM: 31/03/2013

Current membership

Member		Representing	
Chair	Manda Pa	ge	DPaW Species and Communities Branch
Exec Officer	Rebecca K	ay	DPaW Species and Communities Branch
members	Adrian Wa	yne	DPaW Science
	Rebecca C)ng	DPaW Swan Region
	Chris Gilbert		DPaW Southwest Region
	Brian Macmahon		DPaW Wheatbelt Region
	Brad Barton		DPaW Warren Region
	Anthony Desmond		DPaW Midwest Region
	Angela Duffy		DEWNR SA
	David Roshier		AWC
	Andrew Thompson		Murdoch University
	Juanita Renwick		DPaW Western Shield
Dates meetings were held		04/02/2014	

Highlights of achievements for the previous 12 months suitable for publication in *WATSNU* and contribution to DEC annual report. Provide 1-2 paragraphs summarising total number of new populations

- Translocations to Perup Sanctuary, Yendicup and Julimar.
- New findings in disease research by Murdoch University linking trypanosomes to declines.

DATE TO: 31/03/2014

 Woylie Conservation Research Project findings link predation and population density to declines in association with an additional factor such as disease.





located, surveys completed, list major management actions etc

- WWF funded Woylie Outbreak Investigation Workshop.
- Population Viability Analysis and genetics management research continues to inform population management strategy, by Murdoch University.
- Nomination to upgrade the conservation status of the woylie was submitted to the WA TSSC and the woylie was upgraded to Critically Endangered in 2013.
- The woylie population management strategy is being developed and a draft completed.
- Continuation of annual monitoring programs of existing and translocated populations by DPaW and AWC.
- Continuing research into introduced predators and new cat bait Eradicat.

List of recovery actions coordinated by Recovery Team

Detail under the headings below the recovery actions undertaken during the reporting period. Provide separate detail for each species/community against each action. For species/community-specific recovery teams, the generic activity types below can be replaced by the specific recovery actions from the recovery plan where appropriate.

Monitoring and survey of existing and new populations/ occurrences, targeted surveys, critical habitat mapped etc.

Indigenous Populations (Upper Warren and Dryandra)

- Monitoring of medium-sized mammals in the Upper Warren by Donnelly District, Science and Conservation Staff and Fauna Management Course. Woylie numbers in Warren Region are stable overall. Woylies have also been detected to the south of current monitoring areas opportunistically during Forest Check monitoring within the Shannon/Lake Muir area.
- Annual trapping at Dryandra by Great Southern District continues. Trapping suggests the Dryandra population is continuing to decline and may be approaching critical levels but trapping effort is limited

Translocated Populations (DPaW Regions)

- Annual trapping and additional camera monitoring at Julimar in 2013 indicates that the population is persisting. The Sawyer's block site (translocated population) has been monitored though no woylies were detected. There are many sites in Swan Region where translocations occurred historically that are yet to be monitored.
- In the Southwest region woylies are persisting at Windy Ridge Rd in Wellington National Park (4 last trapped), Centaur block (4 last trapped) and Batalling (9 last trapped).

Translocated Fenced or Island populations

- Population within Perup Sanctuary doing well, approx. 350-380 animals.
- Ongoing monitoring of all AWC managed populations including Karakamia Sanctuary, Yookamurra and Scotia sanctuary, all of which are relatively stable.
- Whiteman Park population has reached carrying capacity at approximately 80 animals and a stage 2 enclosure has been completed with capacity to hold 200 animals.
- The SA Venus Bay population persists; four animals were detected during monitoring in 2013. The Island populations in SA remain dense but stable.
- The Wadderin Sanctuary translocated population has increased and reached an approximate density of 2/ha.

Threat amelioration eg weed





control/mapping, fencing/ repairs, fire	
management	
disease management, feral/ introduced	
animal control, installation of roadside	
markers	

- New cat bait 'Eradicat' is currently available for use under a research permit and progress is being made to register it for wider use.
- DPaW science (Tony Friend) undertaking Eradicat baiting trials at Dryandra and Tutanning
- Introduced predator work including improving the quantification of predators (survey method comparisons, camera and hair trap trials), monitoring and predator removal trials (Balban in Sept-Nov 2012, Boyicup in Feb-March 2013) is being carried out in the Upper Warren.
- PhD project looking at the relationship between habitat and the presence of woylies in Upper Warren. This work will be able to better inform the effects of prescribed burning.

Conservation and research e.g. fire research, translocation, ex-situ conservation, revegetation/rehabilitation etc

- In July 2013 woylies were translocated out of Perup Sanctuary into Yendicup (87) and new stock were introduced to the Sanctuary from Dryandra (36) and Kanyana Rehabilitation Centre (five) (Tutanning stock).
- Murdoch University continues to carry out disease research and there is additional evidence that trypanosomes may be associated with the woylie decline. New student projects are underway focusing on parasite transmission and pathology in translocated populations. This work continues to be supported by Native Animal Rescue.
- A WWF funded Woylie Outbreak Investigation Workshop took place in March 2014 drawing experts from various woylie related fields together targeting the first two steps of a nine step framework to pull together the woylie decline puzzle.
- The Woylie Conservation Research Project has established that since 2007 declines have been driven by predation as a result of increased susceptibility to predation (possibly disease). There appears to be an association between decline when woylie density reaches 1/ha.
- 37 woylies originally in care were translocated from Dryandra RTD soft release enclosure to Julimar forest in 2013, supplementing the existing translocated population. Animals have been confirmed to have persisted in the short term via remote camera monitoring using reflective ear tags.
- Work on Population Viability Analysis by Murdoch University indicates that a large population, preferably over 1000 animals, is the best way to maintain genetic diversity. This should be maintained by repeat translocations or restocking of sites regularly to supplement genetics.
- Caring for Our Country funded project led by Warren
 Catchments Council (WCC) in collaboration with DPaW
 entitled, 'Using well managed native habitat to rescue woylies
 from the brink of extinction' has now been completed
 (November 2010–July 2013). An extensive final report has
 been finalised.
- Kanyana Wildlife Rehabilitation Centre continue to provide support via their captive breeding program.

Liaison, education/provision of advice e.g. promotional material inc newspaper/ magazine articles, liaison with land managers/ owners, input to impact assessment, development of specific management plans, volunteers assisting with surveys/ monitoring etc.

- Numerous publications including scientific papers, print and online articles, radio and television media promotion – e.g. Landscope article, WATSNU article, Today Tonight television story, Woylie Outbreak Workshop article in The Australian newspaper.
- Pacioni, C. 2014 Modelling woylie (Bettongia penicillata) population genetics to inform management strategies. WWF-





	 Australia, Perth. Wayne, A.F., Maxwell, M. A., Ward, C. G., Vellios, C.V., Wilson, I.J., Dawson, K. 2013, Woylie Conservation and Research Project: Progress Report 2010–2013, Department of Parks and Wildlife, Perth.
Other actions completed	 A draft Population Management Strategy document has been developed to provide details in regard to population management activities as guided by the National Recovery Plan for the Woylie. Species and Communities Branch is progressing a State Translocation Strategy.