



Department of
Environment and Conservation

Our environment, our future 

**SUMMARY ANNUAL REPORT
THREATENED FAUNA RECOVERY TEAM**

PROGRAM INFORMATION

Recovery Team name	Western Swamp Tortoise Recovery Team	
Reporting Period (Financial / Calendar Year)	Calendar year 2009	
Current membership		
	Member	Representing
1. Chair	Vacant During 2009 <i>Craig Olejnik appointed in April 2010</i>	DEC - Swan Coastal District - Nature Conservation Coordinator
2. Exec Officer	Jacqui Maguire	DEC – Swan Coastal District
3.	Dr Gerald Kuchling	DEC – Swan Coastal District - Chief Investigator
4.	Dr Andrew Burbidge	DEC Science Division - Research Fellow
5.	Sean Walsh	DEC – Swan Coastal District
6.	Helen Robertson	Perth Zoo - Director Animal Health and Research
7.	Dr David Groth	Department of Biomedical Science, Curtin University of Technology
8.	Jan Bant	Friends of the Western Swamp Tortoise (FoWST)
9.	Prof Don Bradshaw	School of Animal Biology, the University of Western Australia
10.	Terry Morley	Adelaide Zoo
11.	Nicki Mitchell	University of Western Australia WA
One to two paragraph summary of achievements suitable for WATSNU	<ul style="list-style-type: none"> - Two Recovery Team meetings held 19 March and 7 October 2009 - Further hydrological modifications were completed at Moore River Nature Reserve. - Translocation of 30 captive bred tortoises to swamps within Moore River Nature Reserve (included release of 500th captive bred 	

	<p>tortoise)</p> <ul style="list-style-type: none"> - Progressed bore upgrade at Twin Swamps NR to be completed in March 2010 to supplement key swamps in dry years. - 27 hatchlings produced at Perth Zoo. - Population monitoring at Ellen Brook, Twin Swamps, Mogumber and Moore River Nature Reserves. - Successful application by DEC for grant from the Perth Zoo totalling \$4790 as part of the WA Threatened Fauna Project. - The DEC, in conjunction with the Perth Zoo and UWA were successful in obtaining the ARC Linkage Project - Animals on the Move/an integrated response to selecting conservation reserves under climate change.
List of actions undertaken by Recovery Team (from the actions in your Recovery Plan)	
Action 1 –Employment of Chief Investigator	State NRM funding provided an allocation towards covering the salary and overhead costs of Gerald Kuchling, Chief Investigator for 2009/2010 financial year.
Action 2 – Management of Ellen Brook, Twin Swamps, Mogumber and Moore River Nature Reserves	<p>Routine management of the nature reserves continued as in past years, including vermin control (baiting for foxes and rats), fence maintenance, weed control and rehabilitation works. In addition monitoring bores with data loggers were maintained and water samples were collected and analysed within swamps at all reserves.</p> <p>Specific management works were conducted as follows at each of the reserves:</p> <p><u>Ellen Brook Nature Reserve</u></p> <ul style="list-style-type: none"> - Two bandicoot trapping and translocation programs were conducted by DEC and Edith Cowan University. Two weeks in autumn and one week during spring 2009. Total of 46 Bandicoots translocated from the reserve. - 3500 seedlings were planted with assistance of the FoWST group. <p><u>Twin Swamps Nature Reserve</u></p> <ul style="list-style-type: none"> - Two bandicoot trapping and translocation programs were conducted by DEC and Edith Cowan University. Two weeks in autumn and one week during spring 2009. Total of 57 Bandicoots translocated from the reserve. - Current bore pump was operational from late June to November 2009 to supplement water in the north west swamp - Progress of the bore upgrade with successful contractor appointed to complete pump and head works early 2010. Bore has been upgraded to further supplement swamps at the reserve in a drying climate. <p><u>Mogumber Nature Reserve</u></p> <ul style="list-style-type: none"> - Aestivation tunnels were installed in the adjacent private property around Sheep Swamp. - Adjacent private property (70ha) north of existing habitat acquired by DEC. Proposal to create suitable WST habitat through pond creation and rehabilitation. <p><u>Moore River Nature Reserve</u></p> <ul style="list-style-type: none"> - Released 30 captive bred tortoises to the western swamp habitat. Included the 500th release of captive bred tortoises.

	<ul style="list-style-type: none"> - Modifications and improvements made to existing bunds and spillways within the habitat. - Vegetation monitoring of established transects conducted within the TEC area.
Action 3 – Tortoise population monitoring	<p>Nests with viable eggs were discovered and monitored at Ellenbrook and Twin Swamps NR's.</p> <p>30 captive bred tortoises were released at Moore River NR in NW swamp area. This is the same location as the previous translocation. 15 had radio transmitters attached. All those radio tracked were recorded to be initially growing at an average rate of 1.4% per week which is considered above average. It was a good year, rainfall wise, at MRNR and swamps were still inundated at of Oct 2009. MRNR is the only current approved translocation site (until 2012) and there is a plan to release 30 – 40 individuals in 2010.</p> <p>Water levels and quality continued to be monitored within swamps at all the WST reserves.</p>
Action 4 – Captive Breeding	<p>Plans were drafted and works costed, to facilitate the upgrade of the captive breeding facilities at the Perth Zoo.</p> <p>Better hatchling rates were recorded compared with 2008</p> <p>27 hatchlings were produced from 15 females at the Zoo. As of Oct 2009 there were 152 WST at the Perth Zoo.</p> <p>A review on the diet of the captive bred WST was conducted and reported on.</p> <p>Also there was an investigation into the breeding genetics diversity of WST at the Perth Zoo and in the wild.</p>
Action 5 – Translocations	<p>Released 30 captive bred tortoises to the western swamp habitat. Included the 500th release of captive bred tortoises.</p> <p>The release was conducted in conjunction with the Perth Zoo, FoWST, local landowners and interested media bodies.</p> <p>15 of the tortoises that were released were radio tracked and monitoring showed they had above average growth rates immediately following their release and prior to aestivation in summer.</p>
Action 6 – Education, Sponsorship and Publicity	<p>The DEC, in conjunction with the Perth Zoo and UWA were successful in obtaining the ARC Linkage Project which was applied for in Nov 2008. The project focuses on choosing habitat for endangered spp. in the face of climate change. The project has been given \$213 000 over 3 years. \$40,000 has come from DEC. Both DEC and Perth Zoo have also offered “in-kind” contributions.</p> <p>Event conducted to release 30 tortoises to Moore River NR was held in August 2009 involving Perth Zoo, DEC and interested media bodies. The event was highly successful with considerable media coverage including a Channel 10 news story. The Environmental Minister also published a media release on the translocation of WST at Moore River.</p> <p>The Perth Zoo provided grant of DEC of \$4790 for a nominated in-situ project (Mogumber habitat restoration) as part of the Wildlife Conservation Action funding program.</p> <p>Education programs at the Perth Zoo continued with thousands of</p>

	<p>students visiting the endangered species lessons and keeper talks</p> <p>The Friends of Western Swamp Tortoise received a Threatened Species Grant of \$5000 to fund activities assisting the habitat creation at Mogumber.</p>
High Priority Actions Requiring Funding	
Task	Amount needed and what for
WST Recovery Program 2010/2011	<p>The WST Recovery Program is currently unfunded for 2010/2011. Recent funding applications submitted to the Commonwealth through the "Caring for our Country" Project (CFoC), to cover some aspects of the WST Recovery Program.</p> <p>The CFoC grants do not fund the employment of a Chief Investigator for threaten species recovery or captive breeding programs, which includes DEC's contributions to the Perth Zoo's WST program (as per the approved MOU).</p> <p>There is also the potential that the current CFoC application may not be successful leaving the entirety of the WST Recovery Program unfunded.</p>
Weed control at WST habitats	<p>Approx \$100,000 required to assist in the weed control at the WST habitats over the next 3 years. Necessary activities include weed mapping, review of weed control methodology, weed control trials and manual and chemical weed removal.</p>
Upgrade of Perth Zoo Captive Breeding Facilities	<p>Up to \$200,000 to assist in the upgrade of facilities at the Perth Zoo. Improvements in all facets of the breeding facilities including relocation within the zoo, increase number and improve breeding and holding ponds, aestivation cages and hatching facilities.</p>
Additional habitat creation at Mogumber	<p>Approx \$100,000 required to complete habitat restoration and management at newly acquired Lot 101 adjacent Lake Wannamal and Mogumber Nature Reserves. Works required include pond creation, seed collection, rehab plantings and follow up weed and pest control.</p>