Department of Parks and Wildlife

RECOVERY TEAM ANNUAL REPORT THREATENED SPECIES AND/OR COMMUNITIES RECOVERY TEAM				
Recovery Team	**Dibbler Recovery Team**			
Reporting Period Submission date 24 April	**DATE FROM:**	**1st April 2014**	**DATE TO:**	**31st March 2015**

Current membership		
Member		**Affiliation**
Chair	**Dr Tony Friend**	Supervising Scientist, Dibbler project, Animal Science Program, Parks & Wildlife
	Dr Roberta Bencini	Research student supervisor, University of WA
	Steve Buitenhuis	Nature Conservation Coordinator, Moora District, Parks & Wildlife
	Geoff Burrow	Malleefowl Preservation Group
	Tim Button	Dibbler Technical Officer, Animal Science Program, Parks & Wildlife
	Jeremy Carter/ Rebecca Carter	Jurien Bay community
	Peter Collins	Fauna Conservation Officer, Albany District, Parks & Wildlife
	Prof Chris Dickman	Scientist with expertise in dibblers (corresponding)
	Cathy Lambert	Supervisor, Zoology, NSBP, Perth Zoo
	Dr Peter Mawson	Director Animal Health and Research, Perth Zoo
	Dr Harriet Mills	Research student supervisor, University of WA
	Dr Dorian Moro	Scientist with expertise in dibblers (corresponding)
	Dr Manda Page	Principal Zoologist, Species and Communities Branch, Parks & Wildlife
	Dr Chris Rafferty	Dept Planning, Whiteman Park
	Dr Juanita Renwick	Western Shield Zoologist, Ecosystem Health Branch, Parks & Wildlife

	Dr Vic Smith	South Coast community
	Dr Tony Start	Scientist with expertise in dibblers
	Dr Pat Woolley	Scientist with expertise in dibblers (corresponding)

Dates meetings were held	13th August 2014 and 4th March 2015
Changes to Team membership:	Dr Vic Smith passed away in September 2014 (see note below). Dr Chris Rafferty of Whiteman Park (Dept of Planning) joined the Team at its Meeting 36 on 4th March 2015. Jeremy and Rebecca Carter's resignations from the Team were accepted at Meeting 36.
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 located, surveys completed, list major management actions etc	Dibblers were released in late 2014 at a new translocation site, Whiteman Park, in Perth's metropolitan area. A group of 55 dibblers from the recovery program's breeding colony at Perth Zoo were released into a 150-hectare exclosure with areas of marri and Banksia woodland and dense scrub patches. Fourteen of the animals were fitted with glue-on transmitters so their dispersal could be followed. Preparations for the house mouse eradication on Boullanger and Whitlock Islands are well advanced, with the baiting due to be carried out in 2015, once the dibblers and some of the skinks are removed to captivity.
List of recovery actions coordinated by Recovery Team	
Action 1: **Monitoring**	**Fitzgerald River National Park (FRNP)** Dibbler monitoring by trapping was carried out at the Hamersley-Moir site, from 24th – 28th March 2014 and in the week of 17th November 2014. In March, only one dibbler (a male recapture) was caught. In November only one night's trapping was completed before an ankle injury to Tim brought an end to the trip. One male was caught (a recapture). The low dibbler numbers recorded are consistent with 2013 results but are puzzling given that good capture rates have been recorded recently elsewhere in FRNP. During the November trip, traps were also set in the gravel pit near Hamersley Drive and a male and a female dibbler (a recapture male and a new female) were captured. The new female was sent to Perth Zoo to enter the breeding colony. **Jurien Bay Islands** Dibbler populations on Boullanger and Whitlock Islands recovered strongly in 2012 from the low levels seen in late 2010 and early 2011. While the recovery on Whitlock continued in 2013, Boullanger Island numbers dropped. These trends continued in 2014. Three monitoring sessions were carried out on Boullanger and

	Whitlock Islands during the year, from 12th – 16th May, 26th – 29th August (Boullanger only) and 20th – 24th October 2014. The August trip was carried out to confirm that breeding had occurred, as no pouch young had been recorded on Boullanger Island in May. In May 2014, 3 female dibblers only (1 new) were caught on Boullanger Island (May 2013 total 35 dibblers, 6 new) and 22 dibblers (3 new) on Whitlock Island (May 2013, 26 dibblers, 1 new). In August 2014, the extra monitoring session on Boullanger Island comprised only three nights trapping instead of the usual four. Six females dibblers (one new) and no males were captured. Five of the females had swollen mammary glands and lactating nipples, confirming that breeding had occurred. It is likely that a male die-off event occurred this year. In October 2014, 26 dibblers (19 new) were caught on Boullanger (October 2013 total 40 dibblers, 15 new) and 38 dibblers (16 new) on Whitlock (October 2013 total 36 dibblers, 20 new). Due to unsuitable sea conditions when visits were scheduled, the translocated Escape Island population has not been monitored since the 17th – 21st February 2014 trip mentioned in last year's report. **Peniup reserve** Monitoring of the Peniup translocation was carried out twice during the reporting period. In June, six adult dibblers (3 males, 3 females) from Perth Zoo were released into Peniup, including two females carrying 8 pouch young each. Trapping was carried out from 6th - 10th October 2014 and 16th - 20th February 2015. In October, two dibblers were caught in Grid 1 (the original release site). Both were new males. As the zoo pouch young were not marked, the origin of these two juveniles is not known, although it may be possible to determine this from DNA analysis. In February, no dibblers were caught. The lack of captures in February is concerning, and follows a slow decline since the peak of spring 2011. More extensive camera monitoring within Peniup will be carried out in the next year.
Action 2: **Habitat Management**	Fox control was carried out during this period in all known mainland dibbler population sites (FRNP, Peniup and around and within the Waychinicup enclosure) by aerial and ground baiting four times a year under the Western Shield program. Supplementary monthly ground baiting is carried out at Peniup and within the Waychinicup enclosure. Funding was granted to Parks & Wildlife under the State NRM Strategic Priority Projects scheme for a project that aims to eradicate house mice from Boullanger and Whitlock Islands off Jurien Bay. These islands support original dibbler populations. The funding runs from October 2012 to December 2015 and trials have been carried out to determine bait uptake by mice and non-target species and

	longevity of baits in the field. Trials to measure the rate of degradation of baits in the field have been run, as have toxic bait trials to determine time to death of island mice in captivity. Logistics planning is well advanced for the eradication baiting in 2015. The proposal is to remove dibblers and larger skinks (*Egernia kingii, Liopholis pulchra longicauda* and *L. multiscutata bos*) into captivity while baiting and bait degradation occur.
Action 3: **Survey**	No additional surveys for dibblers were carried out in 2014.
Action 4: **Captive breeding**	The strategy of enlarging the Perth Zoo breeding group to ensure that 50-60 young are available for release was maintained in 2014. The strategy involves the contingency to release females with small pouch young if more young were born than the Zoo has resources to hold. Twelve males and 12 females were available for the 2014 breeding season. Sixty-nine young were produced and retained to weaning this season. Consequently, three females, two with a total of 16 pouch young, and three adult males were provided to DEC for release ate Peniup in June 2014. Fifty-five dibblers (22 males and 33 females) were provided for release into Whiteman Park in October and November 2014.
Action 5: **Translocation**	The Recovery team decided to support a proposal to release the dibblers produced in 2014 at Perth Zoo into a 150 hectare fenced exclosure in the Whiteman Park Woodland Reserve. The major release of 54 dibblers (two wild-born adults, eight captive-born adults and 44 captive-born young) occurred in the late afternoon of 9th October 2014, followed on 27th November by a captive-born female, held back in October as she was still lactating. Transmitters were fitted to 14 of the dibblers on the morning of release so their dispersal and survival could be monitored by Ph.D. student Luke Kealley (see Research, below). The transmitters were fitted under general anaesthetic. A small patch of fur was shaved off between the shoulder blades and the transmitter glued into place. On 14th December 2014 a wildfire entered Whiteman Park from adjacent land and burnt approximately 60% of the bushland within the exclosure. At this stage the locations of the dibblers were not known, but a substantial area of suitable habitat for dibblers remained after the fire.
Action 6: **Genetics**	DNA samples are collected from each dibbler handled. A UWA Animal Biology Ph.D. student, Rujiporn Thavornkanlapachai, was given access to tissue collected through the recovery program for her study on the genetic implications of dibbler translocations. She is currently writing up her thesis and presented some of her results at the Recovery Team meeting on 13th August 2014.

Action 7: **Community involvement**	Community involvement in the dibbler recovery program continued in 2014. Four community members are on the Recovery Team. Local community members often work as volunteers to help with fieldwork and their assistance is vital to the success of the work. In 2014, 18 people accompanied dibbler project staff on field trips to Jurien Bay, Peniup, the Waychinicup enclosure and FRNP, carrying out a total of 566 hours providing vital assistance in the field.
Action 8: **Research**	An eight-year population study has continued at a dibbler site in the eastern FRNP with all-weather access. This site provides comparative data against which population parameters in reintroduced populations may be assessed. The survey of the FRNP to provide data for predictive modelling of dibbler habitat use continues, but due to financial constraints no further survey was carried out in 2014. . The recovery team continues to support student projects. In addition to the genetics project above, a study by UWA Ph.D. student Luke Kealley on the physiological and behavioural characteristics of individual captive-born dibblers related to their success on release commenced in 2012. Luke Radio-tracked the dibblers released at Whiteman Park in October 2014, recording locations and fate for the animals until their glue-on transmitter fell off.
Dr Vic Smith	Dr Vic Smith made a huge contribution to the knowledge of the fauna of the Torndirrup peninsula at Albany through his long-term pit-trapping program, and through his enthusiastic involvement with shore-bird studies. He discovered dibblers at Torndirrup in 1987 (Smith, V. W., 1990. The terrestrial vertebrate fauna of the Torndirrup National Park. *The Western Australian Naturalist* 18 : 82-92) during his research there. He was an active member of a number of Parks & Wildlife recovery teams as a community representative. He will be missed by all who worked with him.