Department of Environment and Conservation
Our environment, our future

RECOVERY TEAM ANNUAL REPORT

THREATENED SPECIES AND/OR COMMUNITIES RECOVERY TEAM

PROGRAM INFORMATION	
Recovery Team	**Dibbler Recovery Team**
Reporting Period Submission date 31 March	**DATE FROM: 1st January 2012 DATE TO: 31st December 2012**

Current membership (31st December 2012)

Member		**Affiliation**
Chair	**Dr Tony Friend**	Supervising Scientist, Dibbler project, DEC Science Division
members	**Dr Roberta Bencini**	Research student supervisor, University of WA
	Steve Buitenhuis	Moora District, DEC
	Geoff Burrow	Malleefowl Preservation Group
	Tim Button	Dibbler Technical Officer, DEC Science Division
	Jeremy Carter/ Rebecca Carter	Jurien Bay community
	Peter Collins	Albany District, DEC
	Prof Chris Dickman	Scientist with expertise in dibblers (corresponding)
	Cathy Lambert	Senior keeper, dibblers, 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	Species and Communities Branch, DEC
	Dr Juanita Renwick	Environmental Management Branch, DEC
	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	2nd March and 31st August 2012
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	Good winter rains within have produced increased numbers in all dibbler populations in 2012. This recovery has seen the recovery of the Fitzgerald River National Park populations and assisted the discovery of a previously unknown colony at the Marshes Track in the Wilderness Area. The reintroduced population at Peniup reserve is well on its way to becoming self-sustaining, with good numbers being recorded this year despite the lack of any releases there since 2010. The current translocation, to the Waychinicup NP enclosure, has seen released dibblers trapped in various parts of the enclosure. Good numbers of dibblers were also recorded on Boullanger and Whitlock Islands in 2012, where very low numbers have been seen in recent years. A project to remove house mice from those islands in now in the advanced planning stages.

List of recovery actions coordinated by Recovery Team

Action 1 Monitoring

Fitzgerald River National Park (FRNP)

The Fitzgerald River NP is the stronghold of the dibbler. Its large geographical extent ensures a diversity of weather conditions and fire histories and consequently a number of areas experience favourable conditions for dibblers at any one time.

Currently a large part of the western FRNP is recovering from a wildfire that affected 15% of the entire national park in January 2008. Due to some years of low rainfall, post-fire recovery of the vegetation has not reached the stage where conditions are suitable for dibblers. However, our monitoring has indicated that conditions have improved in unburnt parts of the park and dibbler population numbers generally increased in 2012. Good rainfall in the winters of 2011 and 2012 has seen a recovery in the monitored dibbler population at the Hamersley-Moir junction. Monitoring at the Western Shield sites at Twertup Creek and Moir Track did not occur in spring 2012 so it is not known if this recovery has extended to those areas.

During 2012, dibbler monitoring by trapping was carried out at the Hamersley-Moir site on 17th - 18th January (curtailed from four days to two days by a health issue with a volunteer), 24th – 28th September and 18th – 21st December. In January, 9 dibblers (all new) were caught in two nights trapping, In September, 9 dibblers were caught (6 new) while in December, 11 dibblers were caught, including 7 new animals. These results indicate a significant recovery in that area since 2011, when February trapping caught 6 dibblers, April trapping only one and July trapping none.

During the September 2012 monitoring, traps were also set at the East Mount Barren site, which has not been accessible since February 2010 due to roadworks under the FRNP Improvement Project. Three dibblers (all new) were captured in 36 trapnights in September 2012.

At the Twertup Creek Western Shield transect, trapping was carried out only in autumn 2012, with the capture of two dibblers.

Jurien Bay Islands

Dibbler populations on Boullanger and Whitlock Islands continued to show recovery from the low levels seen in late 2010 and early 2011. This recovery was first seen at the spring 2011 monitoring session after good winter rains and continued through 2012. In May 2012, 17 dibblers (9 new) were caught on Boullanger island (May 2011 total 7 dibblers, 1 new) and 14 dibblers (2 new) on Whitlock Island (May 2011 4 dibblers, 1 new).

In October 2012, 71 dibblers (53 new) were caught on Boullanger (October 2011 total 36 dibblers, 28 new) and 26 dibblers (16 new) on Whitlock (October 2011 total 12 dibblers, 9 new).

The translocated Escape Island population was monitored during a trip from 3rd – 7th December 2012. This was the first monitoring sessions the program has been able to carry out since January 2008. Three nights trapping were completed, then sea conditions deteriorated and the trapping program was curtailed by one day. A total of 24 dibblers were captured (all new), indicating a population increase since 2008, when only 9 were recorded. This may also indicate a positive response to recent wet winters.

Peniup reserve

At the reintroduced dibbler population at Peniup reserve near Jerramungup, monitoring by trapping was carried on three occasions during 2012, from10th – 13th January, 14th – 16th March (curtailed to 3 nights by catastrophic

fire danger) and 6th – 10th August. In January, 13 dibblers were caught (4 new), in March, 8 dibblers (1 new) and in August, 15 dibblers (10 new). These results indicate that the Peniup population is also doing well and may now be self-sustaining, given that there have been no releases since October 2010. It remains to be seen whether the population can survive dry years.

Action 2 Habitat Management

Fox control was carried out during 2012 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.

Funding was granted to DEC 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 June 2015 and logistics planning is now under way. The current 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

The survey of the FRNP to provide data for predictive modelling of dibbler habitat use continues, with new dibbler locations along the Marshes Track in the Wilderness Area recorded by South Coast region staff during a survey in November 2012.

Action 4 Captive breeding

In order to more reliably produce around 50 animals for release, breeding was again attempted at Perth Zoo with 12 pairs in 2012, with the contingency to release females with small pouch young if more young were born than the Zoo had resources to hold. Eighty-eight young were produced this season, with all 12 females contributing. Consequently, three females with a total of 16 pouch young, and two adult males, were provided to DEC for release into the Waychinicup enclosure in June 2012.

Sixty-three dibblers (43 males and 22 females) were provided for release into the Waychinicup enclosure on 5th October 2012. This total included one wild-born female brought in during 2009 from the Fitzgerald River NP to enhance the breeding colony.

Two males and three females were captured from Fitzgerald River NP in December 2012, and brought to the Zoo to join the captive colony.

Action 5 Translocation

The translocation to the Waychinicup enclosure continued in 2012, with releases of five adults (one wild-born) and 16 pouch young on June 25th June and 63 dibblers (7 captive-born adults and 57 captive-born young) on 5th October 2012 as detailed above.

As part of the program to monitor Gilbert's potoroos in the enclosure, a network of 20 camera-traps was established in the enclosure in early February 2012. One camera captured a number of images of at least one dibbler. This camera (#3) was positioned between the northernmost two traplines on the dibbler trapping grid, close to the capture site of one of the dibblers caught in December 2011.

Cameras were also set on release nest-boxes in which animals were released in on 25th June. Dibblers were seen for several days at the nest boxes, in some cases entering and leaving. The last dibbler image at a nest box was on 5th July.

Trapping was carried out on the dibbler monitoring grid (an Elliott trap and a Sheffield cage trap at each of 60 trap sites) on 12th - 15th June and 10th - 14th December 2012. In June, only one dibbler, a female (722) with no pouch young, was captured. This animal, which had been released in October 2011, was one of five captured in December 2011.

There were two captures of dibblers in December 2012, both of animals released in October 2012. One was caught on the grid. This animal, male 782, had been released at the main release site on the western edge of the grid. He was captured on the northernmost line near the eastern edge of the grid.

The other capture occurred the week before, during potoroo monitoring using only cage traps. This dibbler, female 791, was caught on the F250 potoroo trapline, almost a kilometre from the trapping grid and from her release site to the north-west of the dibbler grid. The habitat at this site is more open than that on the grid, with stunted jarrah up to approximately 4 metres high, with around 60% shrub cover on gravelly soils.

These results indicate that the establishment of dibblers at Waychinicup NP is slow, with no breeding recorded

since the first release in 2010. Monitoring will continue and the recovery team will assess the results in order to decide on the 2013 release program.

Action 6 Genetics

DNA samples are collected from each dibbler handled. A UWA Animal Biology Ph.D. student, Rujiporn Thavornkanlapachai, has commenced a study of the genetic implications of dibbler translocations and has been given access to tissue collected through the recovery program.

Action 7 Community involvement

Community involvement in the dibbler recovery program continued in 2012. Three community members are members of 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 2012, 13 people accompanied dibbler project staff on field trips to Jurien Bay, Peniup, the Waychinicup enclosure and FRNP, carrying out a total of 25 person-days providing vital assistance in the field.

Action 8 Research

A seven-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, with new dibbler locations along the Marshes Track in the Wilderness Area recorded by South Coast region staff during a survey in November 2012.

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.