# WESTERN BRISTLEBIRD RESEARCH PLAN

## ANNUAL REPORT

## JANUARY 1999

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Summary

During 1998, there was no progress on locating a suitable translocation site, but work on this has already commenced in 1999 and it is expected that a trial translocation will be conducted in the Walpole area in spring 1999.

Population monitoring following recent fires in the Fitzgerald River National Park has shown that

1) Western Bristlebirds appear to be able to survive at least some wildfires,
2) following fire, surviving birds occupy the nearest available suitable habitat and
3) in the Fitzgerald area, bristlebirds can reoccupy burnt areas after about 5-9 years.

# WESTERN BRISTLEBIRD RESEARCH PLAN

## Annual report, January 1999

Progress on research has departed significantly from the schedule specified in the Research Plan, primarily due to the difficulties in locating a suitable translocation site. Activity in 1998 centred around survey in Fitzgerald River National Park following an extensive wildfire in December 1997-January 1998.

At the Recovery Team meeting on 16 December 1998 it was agreed to (1) investigate a promising potential translocation site near Walpole, (2) develop a translocation proposal if this site proves suitable, (3) complete the mid-term review of progress by the 31 May deadline and (4) proceed with a translocation in spring 1999 if results of (1) and (2) above permit a translocation to be done.

The following report is a summary of work carried out in 1998.

### 1. Micro-habitat requirements

No significant progress has been made on this since the last annual report.

### 2. Translocation

As outlined in more detail in earlier reports, various sites have been investigated to assess their suitability as translocation sites. Sites east of Albany have proved unsuitable for various reasons. Several sites near Walpole have also been investigated. Some of these proved unsuitable, but one area in Walpole-Nornalup National Park was noted for further investigation. This area is currently being investigated, and appears very suitable. Details will be made available at the conclusion of these investigations.

### 3. Post-fire monitoring

Four areas in Fitzgerald River National Park (FRNP) were surveyed by Shapelle McNee and Brenda Newbey in October 1998: (a) Woolbernup, (b) Mount Drummond, (c) Telegraph Track and (d) Fitzgerald Track.

*(a) Woolbernup*

The Woolbernup area in the southern part of FRNP was briefly surveyed for bristlebirds in November 1994 (4 territories found) and October 1995 (11 territories found). Because it was thought that this area supported one of the biggest populations of bristlebirds in the park, a more thorough survey was carried out in November 1997. This revealed the presence of 25 territories, confirming the importance of this area within FRNP.

On 27 December 1997, a lightning strike started a fire near Thumb Peak, near the coast in the south-eastern part of Fitzgerald River National Park, not far from the Woolbernup area. Weather conditions and access problems meant that the fire was not extinguished until 22

January, after it burnt a large part of the park. The total area within which the burn occurred was about 90 000 ha, but the burn was quite patchy and probably only about 60 000 ha were actually burnt (G. Broomhall and M. Grant pers. comm.).

Examination of satellite images suggested that the fire boundary was in the vicinity of the bristlebird population, and it appeared that the area occupied by the bristlebirds had been burnt. Arrangements were therefore made to visit the area in April-May 1998, by which time it was expected that the birds would be calling sufficiently frequently to make monitoring worthwhile. Unfortunately, heavy rain prevented access at this time, primarily because of the need to avoid the possible spread of dieback (*Phytophthora*).

Because of continuing moist soil conditions, it was not possible to get to the area until October 1998. At this time, it was found that all 23 sites previously identified had been completely burnt and the remaining two were mostly burnt. However, 23 new sites were identified as being occupied by at least one bristlebird, and in 12 of these there were at least two bristlebirds.

Eleven territories were close to the major fire edge (< 120 metres) and twelve were in remnant islands of vegetation within the burnt area, no further than 100 metres from the edge of the island. Searches were made further than this from the fire edges and in other islands of vegetation, but no further bristlebirds were found. No new territory was further than 1.6 km from a known past site i.e. one that had been positive in 1994 &/or 1995 &/or 1997.

These results are interesting and important because they suggest that most birds survived the fire and moved to the nearest available unoccupied habitat, within 120 m of a fire edge.

*(b) Mount Drummond*

Six bristlebird territories were located in November 1997 on the western side of Drummond Track, near Mount Drummond. None of these territories were burnt in the summer 1997/98 fire. However the area east of Drummond Track was burnt. As Drummond Track had again become a fire line it was considered that the 1997/98 fire might have concentrated more bristlebirds on the fire edge at the western side of the track. However, a brief survey revealed only four territories. This area is drier than Woolbernup and has had more fires in recent times.

*(c) Telegraph Track East*

The population at the eastern end of Telegraph Track, east from the Quoin Head turn-off, was surveyed in August and November 1994, at which time nine territories were found. All territories were north of Telegraph Track as the vegetation to the south had been burnt in 1989. During a brief visit in 1997, three bristlebirds responded to tape playback of a bristlebird call. It was not recorded in which territories these were. The objective had simply been to see whether bristlebirds were calling well at that time of the year (April) in response to playback.

Almost all this area was burnt in the 1997/98 fires, and no bristlebirds were located in October 1998. The survey was not sufficiently extensive to be sure that no bristlebirds had

survived, but certainly the population appears to have been severely depleted. It appears that either the birds did not survive this fire, or there was no suitable habitat close by.

*(d) Fitzgerald Track.*

The Fitzgerald Track area was surveyed in 1985 as part of the rare birds segment of the Fitzgerald area fauna survey when twenty-five territories were located (Newbey and Chapman, 1995). It was again surveyed in 1990 and 1991 as a transect based population survey. In winter 1994 the area was surveyed by B. Newbey as part of the population survey for the Western Bristlebird Research Plan. Twenty-two territories were found and mapped. In October 1994, a comparatively small fire burnt out all of these territories. In November 1994, S. McNee and B. Newbey returned to the area and found that in four places at the fire-edges, bristlebirds had established a total of twenty-six territories. Although none of these new sites was found to have been positive in winter 1994, and not all were surveyed then, some of them had been positive sites in earlier surveys.

In the 1998 survey of the Fitzgerald Track area, all territories located since the 1994 fire were surveyed. Additionally, some territories positive pre-fire in 1994 were inspected. Some of these were photographed and some were surveyed.

A total of twenty-five calling birds were located. Eleven of these were found to be members of pairs and one (possibly two) appeared to be in groups of three suggesting the presence of a young bird. Fifteen territories occupied in 1997 were found to be occupied. Four territories occupied for at least one of the surveys post fire and before 1997 were occupied, fifteen territories previously occupied in at least one post-fire survey were not occupied, and six new territories were located.

As at Woolbernup, most birds were relocated following fire (in this case the 1994 fire) and all surviving birds were located in the nearest suitable vegetation to that previously occupied.

*Conclusions from recent monitoring*

Amongst the conclusions that can be drawn, the following are the most important.

1) Western Bristlebirds appear to be able to survive at least some wildfires.
2) Following fire, surviving birds occupy the nearest available suitable habitat, but it is not known what happens to birds in areas where suitable unburnt habitat does not exist.
3) In the Fitzgerald area, bristlebirds can reoccupy burnt areas after about 5-9 years (this period is known to be shorter in higher rainfall areas near Two Peoples Bay).

**Reference:**

Newbey, B.J. and Chapman, A. (1995). A biological survey of the Fitzgerald area. Part 5: Birds. CALM Science Supplement 3.