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# **NOISY SCRUB-BIRD RECOVERY**

**PROJECT NO 347**

## **ANNUAL REPORT**

**1998**

by

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for the

South Coast Threatened Birds Recovery Team

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### SUMMARY

There were several staff changes in the Noisy Scrub-bird Recovery Program during 1998 which affected the implementation of the Recovery Plan. Most aspects of the Recovery program were completed during 1998 however, despite these changes. The absence of Environment Australia funding during this year was a major concern. Despite these difficulties however, the successful program of translocations to the Darling Range was continued. An intensive capture project at Two Peoples Bay saw the addition of four females to the Willowdale site, eight males and one female at the Upper Harvey site and five males to a new site at Falls Brook. The Willowdale females were radio-tracked after their release and all three sites were monitored regularly. The Minister for the Environment and other dignitaries were invited to one of the releases and this became a successful publicity event. The absence of funds did mean that population monitoring had to be curtailed. The only population monitoring which was achieved was at Mt Gardner, the source population for translocations. This population showed a significant drop from the previous levels. The South Coast Threatened Birds Recovery Team met twice during the year to discuss work in progress or planned.

### INTRODUCTION

Staff changes during 1998 had a significant effect on the Noisy Scrub-bird program. Due to the absence of Environment Australia funding during 1998, the Noisy Scrub-bird Technical Officer (TO), a full time position essential to the operation of the program over the last five years, could no longer be supported. The absence of a TO meant that many aspects of the preparations for the release and capture work and population monitoring could not be completed. Fortunately, CALM was able to employ the NSB Technical Officer for short periods on other projects within the Albany District until funds could be obtained to employ him during the translocation project. However, in July he understandably decided to take up an offer of full time, permanent work elsewhere.

From February to April the Noisy Scrub-bird Project Leader was acting South Coast Region Nature Conservation Program Leader in Kelly Gillen's absence and at the end of April was promoted to this position. While still responsible for the scrub-bird recovery program, I was not able to give it as much attention as it required due to responsibilities for other threatened species work in the region as well as all the other nature conservation projects and off-reserve conservation.

Despite this contraction of the Noisy Scrub-bird team and the loss of most of the funding on which the recovery work was based, the translocations to the Darling Range was continued. This was achieved by obtaining additional funds from CALM Executive Director's discretionary budget which allowed Technical Officer Leigh Whisson to be employed on the project again and other experienced people were brought in to help with the translocation work.

Central Forest Region (CFR) was once again able to provide staff to assist with capture work at Two Peoples Bay, the monitoring of release areas and the radio-tracking work. This assistance was crucial to the success of the Darling Range reintroduction project. The CFR also took on the planning and organisation of the publicity attached to the releases. A small number of volunteers were engaged over the two and a half month period to provide assistance, most of these also had prior experience on the program.

### RECOVERY TEAM

The third meeting of the combined recovery team (South Coast Threatened Birds Recovery Team) was held at Willowdale (Alcoa Australia's mine site) on April 1st, 1998. The results of monitoring release sites in the Darling Range were to hand and although only three singing males were to be heard, the team agreed this was sufficient to warrant proceeding with the planned release of females. The meeting was followed by a field visit to the release sites at Samson Rd where six males had been released in July 1997. One of the males which had established at the lower junction swamp could be heard singing frequently during the visit.

The second Recovery Team meeting for 1998 occurred on December 16th at CALM's Woodvale Research Centre. The results of monitoring at release sites in the Darling Range were discussed and a program for activities in 1999 sketched.

## **RECOVERY PLAN ACTIONS - PROGRESS IN 1998**

The following Recovery Plan actions (numbered as in the Recovery Plan) were addressed during 1998.

### **4.1 MANAGEMENT OF TWO PEOPLES BAY NATURE RESERVE**

#### **4.1.2 Implementation of the management plan**

Management of the Two Peoples Bay Nature Reserve (TPBNR) continued during 1998 under the guidelines provided by the Management Plan (1996). This was largely carried out by the Nature Reserve Assistant, Dave Wilson. The Reserve Manager position which had been occupied by Alan Danks for 12 years has now been changed to that of a District Ecologist with responsibility for the Noisy Scrub-bird program under the direction of the Regional Nature Conservation Leader. The resignation of one of the Albany District rangers provided an opportunity to create a Ranger in Charge position at Two Peoples Bay. The new Ranger in Charge will take up his duties at Two Peoples Bay in March, 1999. Thus the roles of managing both the reserve and the scrub-bird recovery program which, from 1986 until 1998 had been the dual responsibility of one person, have been split into two separate positions.

The departure of the Reserve Manager meant that the house at Two Peoples Bay became vacant. A temporary Ranger in Charge, Terry Hales was appointed to look after the security of the reserve and its public, management and research facilities.

#### **Fire Management**

Vegetation in the low fuel buffer zone which separates the Mt Gardner area from the western half of the reserve, was maintained by slashing. Two more water tanks were installed on the mountain.

#### **Wildfire**

There were no wild fires within TPBNR during 1998.

The Reserve was closed to the public on three occasions during the summer of 1997/98. On the 23rd and 27th of December, 1997 and again on the 7th of January, 1998. These were days of Extreme fire conditions.

#### **Fox Control**

The reserve was aerially baited under the Western Shield fox baiting program four times during 1998. From May to August, buried, 1080-injected chook eggs were laid out along tracks and perimeter firebreaks. In addition, dried meat baits were laid along the Mt Gardner track system whenever fox signs (usually prints) were seen. This occurred on only two occasions during the winter. There were no fox sightings on Mt Gardner during 1998 although several were seen around the boundaries of the reserve.

## **4.2 MANAGEMENT OF OTHER LANDS**

### **4.2.1 CALM-managed public lands**

#### **Waychinicup National Park:**

The edges of Waychinicup Rd which crosses east to west through the Waychinicup Catchment reserve, were slashed to improve access and firebreak value. An additional slashed firebreak linking the Normans Beach break with Ringbolt break has been marked out and will be slashed early in 1999. This will provide some additional protection and suppression access in the eastern end of the park. Fox baiting with aerially dispersed meat baits under the Western Shield program was continued.

### **4.2.2 Other Public Lands**

#### **Gull Rock vesting**

No further progress in obtaining the vesting of this land. Very little management is achieved on the ground at the moment.

### **4.2.3 Private Lands**

Following continued straying of cattle into the reserve at the Eastern end of Moates Lake and an incident involving the attempted illegal building of a hut within the reserve, the owner of Location 3777 was approached to gauge any interest in selling that portion of the property to the government. Unfortunately he was not interested.

## **4.3 TRANSLOCATION**

### **4.3.1 Research into release area selection**

#### **Invertebrate availability in scrub-bird habitat**

Sampling of leaf litter invertebrates in potential and actual scrub-bird habitat in the Darling Range continued during 1998. This work was carried out by Mornington District.

### **4.3.2 Release area selection**

During monitoring field work in March 1998, some additional areas suitable for release of scrub-birds were surveyed in the Darling Range. In particular the Falls Brook area, which had been considered earlier as a potential release site, was re-examined and some suitable areas for releases located.

### **4.3.3 Carrying out translocations**

The priority objective for the 1998 translocation project was to release between 5 and 10 female scrub-birds to established males in the Willowdale and Upper Harvey areas.

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Any additional males captured would be released at Upper Harvey and the Falls Brook area.

In previous scrub-bird translocations females have been captured either using Elliot traps or from nests. Elliot traps have only been effective in areas with high densities of scrub-birds and the majority of females have been taken from nests during July when most breeding females are on eggs. This capture technique requires finding the nest, mounting a nest trap especially developed for the capture of scrub-birds (Danks in prep) without causing the female to abandon, and then operating the trap under cover of darkness when the female is sitting. The procedure does not yield more than 8 - 10 females in a season and may well result in much less. This method necessarily means the loss of the egg or nestling when the female is removed.

The most effective technique for capturing males is the mist net/song playback technique (Danks in prep) which can be applied at any time of the year but is most effective at the beginning of the breeding season (May) when males are defending territories against strong competition. As the season progresses into June and July, the interest of the territorial males in song playback decreases and they become harder to capture by this technique.

Last year two females were captured in mist nets while attempting to mist net males. They were apparently attracted to the male songs and it was thought there might be some chance of turning this response into a practical capture technique for females. There would be enormous advantages in being able to capture females prior to the nesting season and, with additional females captured by the nest trapping technique, could result in the capture of higher numbers. It was apparent that a great deal of experimentation might be needed before a routine method could be established.

To improve our effectiveness in capturing males, and also to make capturing females by the song playback method more likely, an additional shelf was added to the single sided flip-up net which has routinely been used in the past. This meant a bird could be captured no matter which side of the net was approached. In addition, duplicate capture equipment was constructed and two teams of experienced operators could be fielded whenever the conditions were conducive to capturing male Noisy Scrub-birds.

### Male Captures

During the first week of the capture project (18/5) none of the capture attempts were successful. This was due mostly to very poor weather conditions. In the following week conditions improved significantly. Full use was then made of the two capture teams to maximise results in a short period of good weather and between Sunday 24th and Wednesday the 27th a total of six males were captured. This included three birds on the 24th and two on the 27th of May.

From June 2nd to June 12th, the weather once again was not very conducive for mist netting, but more importantly the responses of the males were subdued and only two birds were captured. These two captures were made only after considerable effort and many more capture sites were cleaned up or constructed during this time. Similarly,

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during the last two weeks of June male responses were low and there were few successful attempts. Another four males were caught during this time, however.

An additional two males were caught in July when the focus of our activities was centred on nest searching. These birds showed surprisingly rapid response to the capture tape recordings and were caught at the net within 30 seconds and 2 min (respectively) of beginning playback.

A total of 13 males were captured for release in the Darling range. All came from the Mt Gardner area: six from the Firebreak Valley area, most of the rest from an area south of the summit which has traditionally been very productive.

### Female Captures

As planned, attempts were made to capture females by luring them to the nets using male song. For scrub-birds, the peak of egg laying usually occurs in the last week of June. Females can be expected to be interested in mating, and therefore in male song, for perhaps a week or two (maybe less) prior to this time. Consequently attempts to capture females using mist nets and male song playback were carried out from early in June. The new mist net lines created for female captures were used as well as several of the male sites. However, no response was obtained from the females to any of a variety of male and female calls on these occasions throughout June. One female was actually observed to move away from the speakers. This was a disappointing result and in contrast to the two occasions last year when females were captured in mist nets while attempting to catch territorial males (Danks, 1997).

The traditional method of capturing females from nests was thus resorted to and nest searching began on July 7. Known nesting areas in the major gullies were the focus of the initial searching. Other areas which require more time and effort and rarely yield an active nest were searched later. Five active nests were turned up in the first week with a further two in the following week. Three more were found by a second team which began work on the 20th. This gave a total of 10 active nests for the season.

The first captures were attempted on 16th July. On this occasion two nests about 100m apart in Robinsons Gully were fitted with nest traps in the late afternoon and the traps operated about 1800. One was successful, however the other nest had been abandoned. Other successful captures of females from nests followed. A total of five being captured and translocated from the ten nests. One egg was predated in the nest (probably by a Mardo); two were abandoned - one at the time the nest trap was fitted, the other probably before the trap was fitted; one nest was crushed by the careless footfall of an inexperienced nest searcher.

For seven nests for which laying dates could be estimated, laying occurred between 20th May and 2nd July. One egg was laid in the 3rd week of May, three in the second week of June, two in the third week of June, and one in the first week of July. Six of the seven eggs were therefore laid at least one to two weeks earlier than usual. Hence, it is possible that females in 1998 were most interested in males during late May and early June - prior to most of the capture attempts.

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### Releases

A total of eighteen Noisy Scrub-birds were released in the Darling Range in 1998; 13 males and five females.

Eight males and one female went to the Upper Harvey release site. On 29th of May a group of six males were transported 450 km from the holding aviaries at Two Peoples Bay and released at a number of points along the Harvey River and its upper tributaries. Release points were selected on the basis of the preference shown by the territorial males from the 1997 releases for swampy sites, particularly those at stream junctions. Two more males were released at the Nanga Rd swamp on 4th of August as part of the media event/ publicity release. This brought the number of males released in the Upper Harvey area to 15 (7 in 1997 and 8 this year).

Two males were released at Falls Brook on 12th of June. A second group of three males were released here on 25th of June. This release included the 150th Noisy Scrub-bird to be translocated since the program started in 1983. This was a significant event in the history of scrub-bird conservation representing an enormous amount of work by many people. The occasion was celebrated on site by the release team which included Leigh Whisson, Bruce Withnell, Otto Mueller, Melissa Danks and myself.

Four females were released at the Willowdale site where two males had been singing territorial song consistently since last year indicating the habitat there is able to support scrub-birds. These females were fitted with transmitters and their post-release movements monitored (see below). A single female was released with the two males at the Nanga Rd swamp in the Upper Harvey area on Aug 4th.

A publicity event was organised around the releases on the 4th of August and was attended by Hon Cheryl Edwardes MLA, Minister for the Environment, Dr Syd Shea, Executive Director of CALM and representatives from the Shire of Waroona and Alcoa Australia.

### Radio-tracking

The four females which were released at the Willowdale site carried radio transmitters mounted on the tail feathers and their movements over the weeks following their release were followed. In the first week, four people were involved at the site: Allan Burbidge, Peter Cale, Belinda Cale and Bruce Harvey. After that, Bruce was able to do some regular checks of positions but there was no close monitoring of the movements of the birds.

The radio-tracking report (Burbidge et al) provides details of the movements of the females after they were released in an area where two males were singing regularly out of the original six which were released in June/July 1997. Two females were released close to where the males were singing and two were released 200-400m away along the streams where males had previously been released in 1997.



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In brief, the two females which were released close to the males stayed nearby for several days after which one crossed over into the Samson Rd area upstream from the singing male (and female) at the lower swamp. One of the other females released 300m upstream from this swamp, lost her transmitter after one day. This was disappointing from the point of view of following her movements but her presence had already caused a previously undetected male to sing. The other female also later crossed over into Samson Brook.

The certain knowledge that there was at least one more male which had survived the 1997 release was an important outcome of the radio-tracking. This raised the known survival rate of the males released at Willowdale to 50%, which is relatively high for scrub-bird translocations and provides further support for the quality of the habitat and the likely success of the reintroduction.

### 4.4 MONITORING NOISY SCRUB-BIRD NUMBERS

#### 4.4.1 Post-release monitoring

##### **Darling Range**

In July 1997, immediately after the initial releases, all six males could be heard singing at Willowdale release site. By December, however only three males were singing. Two of the seven released at the Upper Harvey site were still singing at this time. In March, 1998, when the birds had been on-site for eight months and approaching their next breeding season, only two males were singing intensively at Willowdale, and only one could be heard at the Upper Harvey. As related above, the presence of a third male was detected during radio-tracking at Willowdale in July, 1998.

Since July, 1998 when females were released at the Willowdale site, the area has been monitored regularly by Bruce Harvey of Mornington District. For most of this time the two males have continued to be heard singing. In January, 1999, a third male was detected and a female sighted. At Upper Harvey, up to five were heard in the months following the 1998 releases. By December, 1998, only two could be heard. In January 1999 only one is heard regularly. At the Falls Brook site also, only one male is regularly singing in January, 1999. The release sites will be checked thoroughly in April, 1999.

##### **Stony Hill**

There were two reports of possible Noisy Scrub-bird calls from this area during 1998. The gullies where the calls were heard were investigated but both contained very marginal habitat. One of the sites was within the original release area which had been burnt in a wildfire in February 1998.

##### **Mt Taylor**

No surveys of this area were made during 1998. The vegetation appears to be recovering from the 1996 wildfire, however, and some time should be spent in this area in 1999.

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### **Mermaid**

This area was not surveyed in 1998.

### **Bald Island**

An expedition to the island planned for May had to be cancelled because sea conditions made landing impractical.

#### **4.4.2 Parent population monitoring**

The Mt Gardner area received considerable attention during the capture program in May, June and July. The presence and locations of singing males were recorded at this time when there was considerable activity. In September, Shapelle McNee was contracted to census the singing males in the Mt Gardner area and performed a very thorough job. There were a number of males singing during the period June-July, however, that were not to be heard in September which is rather later than the census is usually performed. The known singing males were totalled for the "breeding season" and this came to 140.

This is a significant drop from the 167 of the previous year. There has not been any decrease of a similar size over a single year in the Mt Gardner area since annual recording began 1970. From 1970 to 1993, the trend has been a steady increase with one or two minor drops which were quickly recovered. Between 1993 and 1997, the number of singing males counted varied between 166 and 178 and the population was thought to be stabilising. The current drop is a dramatic change.

The large drop in the Mt Gardner population index may be due to seasonal factors in which case there should be a return to higher numbers next year. It is also possible that the decrease in the number of singing males counted may have been due to a reduction in habitat quality/carrying capacity of the area. With post-fire age of the vegetation on Mt Gardner generally exceeding 60 years it is not hard to imagine that this might be the case. In any event it is to be hoped that this is not the beginning of a serious decline such as that seen in the Lakes area from 1988 to 1992 when virtually the whole subpopulation declined to local extinction.

#### **4.4.3 Lakes area**

No systematic survey was carried out in Lakes area. However, three singing males located between the main road and the eastern shore of Lake Gardner were regularly heard during the 1998 breeding season. Additionally, at the beginning of the season, two males were heard near the research station - one in Wilson Swamp and one in the Car Park. This area is part of the Lakes area. In June only the one in Wilsons Swamp was singing. Capture of this bird showed it was unbanded and therefore not the same as the male that was captured there in 1997. The male in the Car Park swamp was no longer singing at this time.

#### **4.4.4 Total population**

The total Noisy Scrub-bird population could not be assessed in 1998 because only the Mt Gardner and Darling Range release sites were monitored. The drop in the number of singing males counted on Mt Gardner in 1998 indicates the need to continue

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monitoring this population closely. As the probable repository of most of the genetic diversity of the species and the source of the majority of translocated scrub-birds, its continued viability is very important to the recovery program.

### 4.5 EDUCATION, PUBLICITY AND SPONSORSHIP

#### 4.5.1 Education and publicity

##### Visitor Centre

Work continued on the new visitor centre at Two Peoples Bay during 1998. Corinn Hine, a part time information Officer, developed the display panels and these were installed in October. The computers and electronic equipment for the audio-visuals and presentation equipment are currently being fine tuned by a part time technician, Carl Beck. During the last few months the centre has been open for visitors whenever the RIC is in attendance. An official opening is planned for March.

##### Media

There was strong media coverage of the official release of scrub-birds at the Upper Harvey site which marked the introduction of females to the Darling Range in July 1998. Television (GWN), radio (ABC) and local newspapers all covered the event which was very well coordinated by CALM Mornington District staff. The efficiency of the organisation, catering and displays resulted in a very successful event.

##### Talks

Several presentations were made to participants on the CALM/STS Leeuwin Eco-voyage in February, 1998 which covered conservation and threatened species recovery programs at Two Peoples Bay. The eco-voyagers spent a day and a half at Two Peoples Bay and where they were involved in a number of activities.

The Walpole-Nornalup National Park Association invited the author to give a presentation about the Noisy Scrub-bird to their meeting in July. This was very well received, the audience of local conservationist showing intense interest in the recovery program.

##### Volunteers

A small number of volunteers gave their time and energy to the project in 1998, mainly during the period of captures for release in the Darling Range. Otto Mueller's nest searching skills were particularly valuable in July. Belinda Cale assisted with the radio-tracking of females at Willowdale. Melissa Danks monitored the Wilsons Track trap line, fed captive birds and carried out general aviary duties, helped with releases and radio-tracking of "Spot". Sarah Adriano quickly learnt the art of nest searching and became a mainstay of the team in July.

## ACKNOWLEDGMENTS

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Thanks to all the people who contributed to the success of the Noisy Scrub-bird recovery program in 1998. In particular I thank Leigh Whisson who, over a five year period at Two Peoples Bay, became the backbone of the recovery effort. His enthusiasm and determination were fundamental to everything we have achieved with Noisy Scrub-birds in that time. He will be greatly missed.

It was a pleasure to have people of the calibre of Bruce Harvey, Lawrence Cuthbert, Peter and Belinda Cale, Shapelle McNee and Otto Mueller working with me this year. They were all knowledgeable, dedicated and hard working companions. It was also a delight to have my daughter Melissa as part of the team for a couple of weeks. Chris Gilbert and Sarah Adriano deserve a special mention for the effort they put in to hand rear an orphaned nestling. Reserve neighbours Lois, Randolph and Dorian also gave their time freely and collected enormous numbers of slaters as did Pip Jahns and family. I thank Rob Brazell, Tom Keneally and Drew Griffiths for their support for the Darling Range reintroduction and especially for organising the publicity event.

I thank Alcoa Australia for their continued interest and support for the Darling Range reintroduction. The support and guidance of the South Coast Threatened Species Recovery Team is also acknowledged

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