

Regent Parrot Nest Survey 2017

Kevin Smith

Introduction

All people who have shown an interest in Regent Parrots over a number of years through assisting with nest surveys or reporting sightings were invited to assist the SA Regent Parrot Recovery Team to conduct a “whole of river” survey for Regent Parrot nests in SA during the 2017 breeding season. The number of responses were such that it was decided to conduct a “Reach” survey in the section of river from Lock 2 downstream to Cadell. A small number of volunteers who preferred to conduct nest surveys in an area nearer their homes were encouraged to provide information about nests in their area.

The volunteers who indicated they could assist were given a series of information sheets providing them with a knowledge of the ecology and behaviour of the birds with an emphasis on breeding season behaviour. Details of survey methods were also provided. A plan was devised where the designated reach could be surveyed thoroughly by the volunteers who had registered to participate in the survey.

For various reasons only a small number of the volunteers were able to participate in the nest survey. Those who did participate were allocated sections of the reach to survey where there were known to be nest colonies in previous years. This resulted in most of these known colonies being surveyed.

Other areas surveyed included the section of river from Lock 4 downstream to Loxton, from Dix Cutting upstream to Chowilla Homestead and a small section of Katarapko Creek.

Method

Participants who had no previous experience with nest surveys were met at Hogwash Bend Conservation Park and provided with basic instructions on how to locate and record details of Regent Parrot nests.

Experienced surveyors were provided with the equipment and encouraged to conduct surveys when time permitted.

Results

Four sites known to previously contain nesting colonies were surveyed in the area from Lock 2 to Cadell. Other sections of the river adjacent to these colonies were also searched to determine if the colonies had moved from their previously known locations. All but one of the known nest sites between Lock 2 and Hogwash Bend Conservation Park were surveyed. Time constraints and weather conditions prevented the Southcorp site from being surveyed.

The section of river from Lock 4 to Loxton was thoroughly surveyed resulting in six nests being located in this area.

Despite Regent Parrots being observed often and seen feeding in the area between Dix Cutting and Chowilla Homestead, no nests were located. Regent Parrots were observed flying through the area, but it appears they were on their way to nesting sites further upstream.

A section of River Red Gum woodland adjacent to Katarapko Creek had a number of Regent Parrots lingering in the area, but due to time constraints only two nests were recorded. This is an area warranting close attention in the future as the number of birds present would indicate the presence of a breeding colony.

Lock 2 - Cadell

Whole of river surveys have only been conducted on two occasions in this section of the river in 2003/4 and 2010/11. Table 1 provides details of these surveys and compares them with the results of this year's incomplete survey of this section of river.

Table 1. Whole of river surveys Hogwash Bend to Lock 2**Compare**

Colony	03/04		10/11			2017	
	trees	nests	trees	nests		trees	nests
Hogwash Bend	22	29	38	47		14	16
Markaranka	14	14	20	40		14	19
Southcorp Flat	0	0	13	19		-	-
Schiller's Lagoon	0	0	13	19		2	2
Totals	36	43	84	125		30+	37+

The Hogwash Bend colony has been the subject of a number of nest surveys over the years as a part of the "ten colonies nest survey". Table 2 shows the extent of the variation in nest numbers for this colony since 2003/4.

Table 2. Hogwash Bend Nest Surveys 2003/4 - 2017

2003/4	2006	2008	2010	2013	2017
29	39	53	47	48	16

Lock 4 - Loxton

The river corridor from Lock 4 to Loxton has been surveyed on three occasions 2003, 2010 and 2017.

Table 3 shows the results of these three surveys.

Table 3. Nest surveys Lock 4 to Loxton

2003/4			2010/11			2017	
trees	nests		trees	nests		trees	nests
0	0		17	18		6	6

Discussion

The reason for conducting nest surveys is an attempt to monitor the population of this species in SA. Because Regent Parrots utilise areas of the landscape from mallee to river corridor and move about this large area in various sized flocks, it was postulated that the only time that the birds are restricted to an area for any length of time was when the breeding pairs returned to the river corridor where there are suitable trees with nest hollows was from August to November (breeding season). This is still a mammoth task, as there is over 360 km of river and a large number of wetlands and floodplain areas where these suitable trees are located.

Whole of river surveys conducted in 2003/4 and 2010/11 determined that the Regent Parrot population consisted of 350 – 400 breeding pairs. The number of juvenile birds that do not return to the river to breed is unknown. These 1-2 year old birds have been recorded in crèche flocks in mallee areas both north and south of the Murray River. The size of these flocks vary and they move about the mallee landscape. In 2014 a survey in Gluepot Reserve (50km north of the river) recorded 3 separate flocks at watering points. However, there are many more watering troughs and dams spread throughout the Bookmark mallee area that other crèche flocks could be utilising. A similar situation occurs south of the river.

What is the population of Regent Parrots in SA and is this changing?

The answer is that we do not know.

We conducted surveys of the 10 biggest known breeding colonies from 2003/4 until 2013 (Table 4) and this data alone would suggest that the population is declining.

We have placed cameras on nest hollows for three breeding seasons and these indicate that Regent Parrots are successfully producing on average at least 2-3 young per nest each year and as they are reasonably long lived birds we would expect the population to be increasing.

Reports received from members of the public only add to the confused message we are getting with some observers saying that they are seeing many more Regent Parrots than ever before and others the exact opposite.

The problem is that they not only move nesting locations (it was generally considered that they return to the same area to breed each year), but they are very adaptable and utilise a wide range of food sources. This makes the task of monitoring the population extremely difficult.

Other parrots and cockatoos numbers can be monitored by counting birds on specific food sources (Carnaby's Black Cockatoo, Orange-bellied parrot, Swift Parrot), at roost sites (Red-tailed Black Cockatoo) or at nest sites (Glossy Black Cockatoo), but these species are habitual and can be relied upon to behave in a predictable manner.

"The only thing predictable about a Regent Parrot is its unpredictability"

Table 4: Total nests in 10 selected colonies

Year	2003/4	2006	2008	2010/11	2013
No. nests	175	164	155	105	110

What next??

A generous grant from the Banrock Station Environment Trust has enabled us to purchase 10 trackers. These will be attached to juvenile birds early in 2018 with the aim of tracking the birds as they move about the landscape and provide us with an understanding of the factors that are impacting upon their long term survival.

Acknowledgements

I wish to thank the following people for giving their valuable time and effort in assisting me to conduct this year's Regent Parrot nest survey.

Lock 2 - Cadell

Trevor Caldwell, Michael Dolan, Gloria Fabian, Peter Haines, Chris Hedger, Matt Humphrey, Nancy McMurray, Brian Tiernan.

Other locations

Peter Freeman, Helga Kieskamp, Jenny Winn, Norm Winn.

Thank you also to Banrock Station for providing some of their excellent wine for the benefit of the volunteers.