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Report to the Muir's Corella Recovery Team May 2008



Photo: Eve Parry

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Report to Muir's Corella Recovery Team, May 2008

Recovery Action 11.2: Determine population numbers, distribution and movements.

Action 11.2.1: Ground surveys will be carried out quarterly by DEC Warren Region Staff.

Action 11.2.2: DEC staff will also establish and maintain a program of community involvement in the monitoring of Muir's Corella.

Action 11.2.3: The results of the surveys will be reported to Recovery Team members, local landholders and the local community via the media

Recovery Action 11.2.1 Muir's Corella Surveys

Several methods have been used to estimate the Muir's Corella population size and trends including ground-based transects and surveys and aerial surveys. Two 100 kilometre road-transects have been driven quarterly by DEC's Donnelly District (2000-2008). Although conducted regularly these do not provide an estimate of population size. Two ground-based surveys involving a single-point count and a road-transect were carried out by the Department of Agriculture in 1991 and 2002 along with seven aerial surveys between 1990 and 2002 (Massam & Long, 2002). Ground surveys were found to be more effective in estimating bird numbers, while aerial surveys were useful for surveying areas not easily covered on the ground. Although information on the distribution of Muir's Corella was greatly improved as a result of these surveys, the number of birds detected was below 1500 individuals and resulted in an underestimation of the total population size.

Based on previous efforts at estimating the population size of Muir's Corella, the following survey requirements were identified:

- 1) a ground-based survey was needed to accurately estimate bird numbers. A ground-based survey would not only facilitate a more accurate estimate of the number of birds in each flock but also increase detection of birds by being able to listen for their calls.
- 2) the survey needed to cover a large area of the Corella's known range and distribution and to include as many flocks as possible to gain the most accurate estimates.
- 3) the survey would need to be conducted at multiple sites simultaneously to ensure highly mobile flocks were not counted twice, the majority of the sites being private properties
- 4) the survey would be most efficient between January and March when corellas reach maximum flocks sizes

Corella Count 2007

The first simultaneous ground survey (*Corella Count*) was carried out in 2007, showing that numbers were well in excess of the 3000 previously reported. Approximately 9350 birds were counted on 22 private properties simultaneously between 6 and 6.30pm on 14 March 2007 by Department of Environment and Conservation and Southern Forests Landcare staff together with land owners and volunteers. This method of surveying Muir's

Corella which had not been used before appeared to deliver a more accurate estimate of population size than previous methods.

The result of the survey reinforced the observations made by many landowners of an increase in bird numbers over the last decade. The reported increase in bird numbers since 2002 was likely due to a combination of factors including consistent underestimation of Corella numbers, an expected increase in numbers due to natural breeding success and the aggregation of formerly dispersed flocks due to loss of feeding habitat through the expanding blue gum plantation industry on private agricultural land.

Corella Count 2008

Due to the success of the first *Corella Count*, the survey methodology was repeated again in 2008. The second simultaneous Corella Count was conducted on 27th February 2008 between 7pm and 7.30pm (daylight savings time). A total of 11197 birds were recorded on 34 properties. 20 survey teams lead by DEC staff (Table 1) counted a total of 9415 birds (range 2-3035 birds), with an additional 14 properties surveyed by the land owners (Table 2) totaling 1782 birds (range 0-850 birds).

Overall there was an increase in the number of corellas counted compared to 2007's total of 9350 birds. The increase in birds counted in 2008 is most likely due to the increased survey effort as the number of properties surveyed increased from 22 in 2007 to 34 properties. The extent of the survey spanned from Dinninup and Mayanup to Lake Muir, Rocky Gully and east to Frankland (Figure 1). The survey sites were spread across the Shires of Manjimup, Cranbrook, Plantagenet, Boyup Brook and Kojonup and Blackwood, Donnelly, Frankland and Great Southern DEC districts (Table 3). Approximately 64 people, including 27 land owners, 15 volunteers and 22 Donnelly District (DEC) staff were involved.

Future Corella Counts

Further annual, simultaneous surveys involving private landowners are required to document the population size and distribution of Muir's Corella. This allows the department to reliably assess the category of threat that applies to this species and also guide management decisions. The success of such a survey is reliant on community support, particularly from those landowners that host large numbers of the birds.

If the Corella Count is to continue expanding in coming years, then increased support from other districts will be required and/or a higher proportion of those sites will rely on land owner/land managers conducting the count themselves. The number of DEC staff and vehicles required to send a survey team, and the distances that need to be travelled to the northern limit of the distribution could be a limiting factor to the expansion of the count unless self counts are accepted as a valid method of assessing bird numbers. While this year's self count results do not indicate numbers have been inflated, future self count results may need validation by some method.

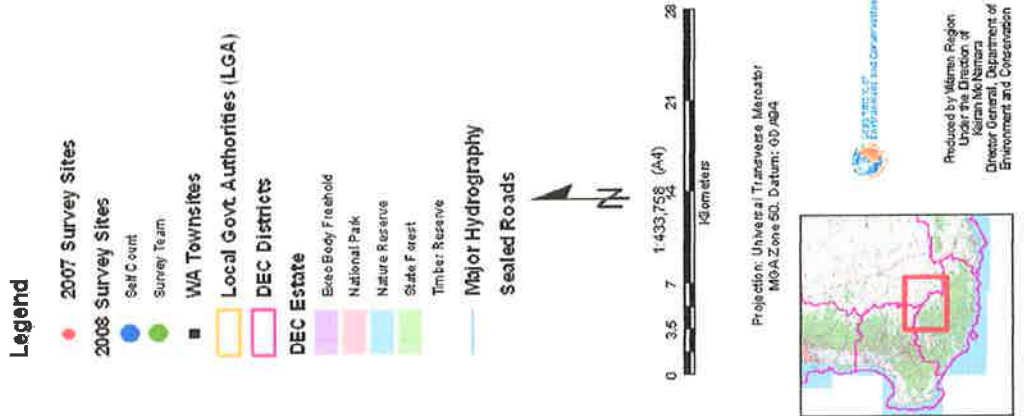
Table 1: Properties attended by survey team

Surname	First Names	Property	DEC District	Shire	Survey Result
Beasley	John & Felicity	Westfield	Great Southern	Cranbrook	200
Bigwood	Ruth & Rohan	Benachie	Donnelly	Cranbrook	750
Chapman	Des and Shelley	Beaufort Vale	Donnelly	Boyup Brook	25
Coole	Richard & Debbie	Alkoomi	Donnelly	Cranbrook	19
Coole	Richard & Debbie	Kulunilup	Donnelly	Cranbrook	5
Coole	Richard & Debbie	Glenerin	Donnelly	Cranbrook	400
Coole	Richard & Debbie	Corri Park	Donnelly	Cranbrook	2
Coole	Stewart and Helen		Donnelly	Cranbrook	125
de Landgraft	Fred & Peg		Donnelly	Boyup Brook	250
Hamilton-Kay	David & Cheryl		Great Southern	Cranbrook	124
Higgins	Robin & Jan	Bangalup	Frankland	Plantagenet	680
Jennings	Peter & Lyn		Blackwood	Boyup Brook	200
Meade	Sue and Glen		Donnelly	Boyup Brook	17
Morey	Rob & Lisa	Marrivale	Donnelly	Cranbrook	32
Muir	Graeme & Gail		Donnelly	Manjimup	7
Muir	Murray & Jan		Donnelly	Manjimup	3035
Phillips	Bill & Irene		Donnelly	Manjimup	325
Tuckett	Ronald and Helen	Valmora	Donnelly	Boyup Brook	580
Turner	Richard and Helen	Tone Park	Donnelly	Boyup Brook	2560
Ward	Bill and Rosemary		Frankland	Plantagenet	79
				TOTAL	9415

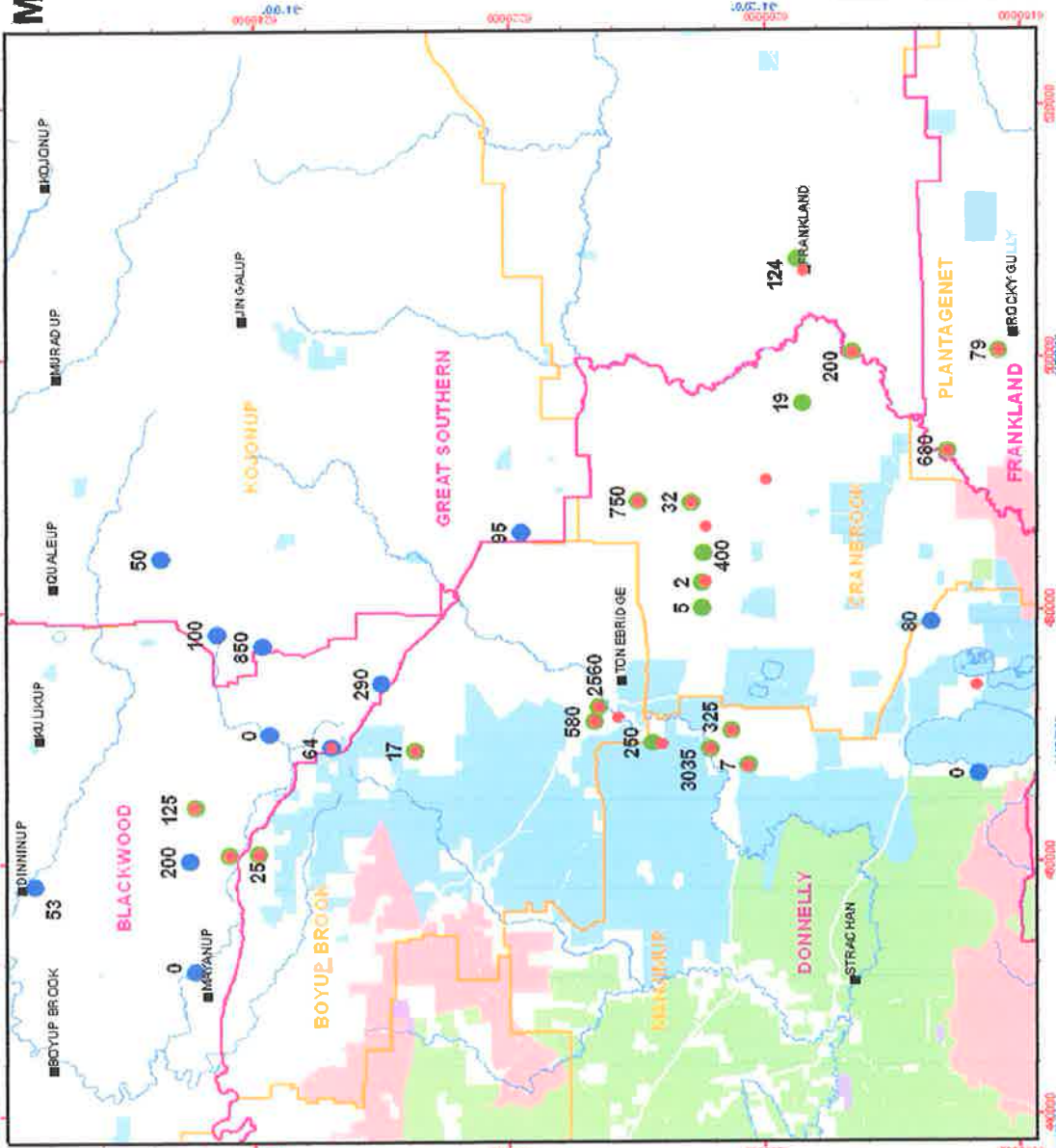
Table 2: Properties involved in Corella Count: Self count

Surname	First Names	Property	DEC District	Shire	Survey Result
Broockmann	Paul & Jacquie	Ellerslie	Blackwood	Boyup Brook	64
Graham	Ernie & Rose	(home farm)	Great Southern	Kojonup	850
Graham	Ernie & Rose	(Mobrup)	Great Southern	Kojonup	95
Graham	Des & Jane		Great Southern	Kojonup	50
Hack	Tom & Helen	Keninup	Blackwood	Boyup Brook	200
Knapp	Ralph & Betty	Uradale	Blackwood	Boyup Brook	0
Muir	Ashley and Sue		Donnelly	Manjimup	0
Parke	Les & Bev	Parkfield	Donnelly	Manjimup	80
Parker	I R H & E A	Benbecula	Blackwood	Boyup Brook	0
Simpson	Daniel	Koja	Great Southern	Kojonup	100
Thompson	Keith		Blackwood	Boyup Brook	53
Tuckett	Noreen	Dandarraga	Blackwood	Boyup Brook	290
				TOTAL	1782

Muir's Corella Count 2008



Produced by Warren Riggall
Under the Direction of
Kerim McNamee
Director General, Department of
Environment and Conservation



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Figure 1: Distribution and results of survey sites for Corella Count 2008, showing properties surveyed in 2007.

Table 3: Breakdown of 34 properties surveyed

District/Shire	Survey Team	Self Count	Total
Blackwood	1	6	7
Donnelly	15	2	17
Frankland	2	0	2
Great Southern	2	4	6
Boyup Brook	6	6	12
Cranbrook	9	0	9
Kojonup	0	4	4
Manjimup	3	2	5
Plantagenet	2	0	2

Recovery Action 11.2.2 Community Involvement

As the majority of corellas are found on private (agricultural land), it is vital to maintain community involvement in the monitoring of Muir's Corella. The aim for this year's Corella count was to increase the number of properties surveyed. To encourage land owners to come forward and register their properties as potential survey sites, notices were put up in Manjimup town centre, on Manjimup.com website, and in the local newsletters; The Franklander and Boyup Brook Gazette. Very few leads came from these avenues.

All previous participants were sent a leaflet about the 2008 Corella Count. By far the most efficient way of increasing community involvement was by word of mouth from previous participants. Two days were devoted to meeting with potential new survey site property owners to discuss the reason behind the survey and to explain the methodology. Making the time to talk to these landowners face to face improved the likely-hood of them participating in the count, especially if they were to conduct the count themselves.

Recovery Action 11.2.3 Reporting of Results

The results of the Corella Count were reported via a letter to all landholders participating in this year and last year's survey (Attachment 1), in the local newsletters; The Franklander and Boyup Brook Gazette; and a media release (Attachment 2) that resulted in articles appearing in the Donnybrook-Bridgetown Mail and Bridgetown-Manjimup Times on 13th and 14th May 2008, respectively. An interview with ABC Radio on May 14th 2008 also reported the results of the count.

Recommendations for next count

- Bird counting: use/provide sheep counters
- Survey meeting place: have the meeting place and BBQ on a property that has Corellas present eg Tuckett or Turners (suggested by Helen Tuckett) or a central place such as Tonebridge Golf Club or Chowerup Hall. The expansion of the survey into the northern areas of the corella distribution resulted in some survey teams having one to 1.5 hours travel time between the current meeting place at Unicum

Hall and their survey site. A more central place will also allow more landholders to join the debriefing at the end of the survey.

- Survey teams: Due to sheer quantity of birds, the Turner survey team was not able to count all birds. If feasible have 3 survey teams target Tucketts/Turners (one survey team on each property plus one 'floater')
- Survey time: Adjustment of the survey time is required depending on whether daylight savings is in operation.

Recovery Action 11.7 Produce a 'recovery kit' and distribute to the wider community

Action 11.7.1: The 'Muir's Corella Recovery Kit' will be prepared to increase awareness that the species is endangered and to provide information on actions that can be carried out by landholders to assist in the recovery effort.

Recovery Action 11.7.1 Muir's Corella Information Kit

1000 packages will be produced consisting of two information booklets titled 'Muir's corella: conserving a threatened species' and 'Minimising the damage and nuisance caused by Muir's corella'; leaflets on the use of Bird Frite and 'Living with Muir's Corella' and an introduction letter. 600 information packages are due to be mailed to land owners/managers with property within the range of Muir's Corella and also to owners/managers with property within the expected future distribution of the birds (Table 4). Activ will assemble the 600 packages for posting.

Table 4: Expected distribution of Recovery Kit

Shire	Number Distributed
Boyup Brook	282
Cranbrook	50
Kojonup	162
Manjimup	48
Plantagenet	58

A number of kits will be distributed to the local NRM group (Southern Forests Landcare) and regional DEC offices in Albany, Narrogin and Bunbury. A number of copies will be made available at the Western Australian Farmers Association Zone meeting in July 2008. The kit will also be available online on DEC's Naturebase website.

Additional Items

Gas Cannons

Three Exid triple shot gas cannons (E.H. Cambridge & Co.) were purchased by the DEC Warren Region. The gas cannons will allow farmers to trial the use of the gas cannons to reduce the damage to crops caused by Muir's corellas. Notification of their availability was announced in the post-survey letter to all participants of this and last year's *Corella Count*. One cannon has been in use since late April, one is booked for use mid May and one has been returned with a fault for repair or replacement.

Suggestions and Comments by land owners

In discussions with land holders, several suggestions on how to deal with the corella issue were put forward. Aside from perhaps the most obvious suggestion of lifting the ban on shooting to kill, two suggestions are as follows:

- Glynn Bevan, a Mordalup farmer, believes that the Corellas should not be dispersed and should be contained in their current range. He believes shooting to scare will just disperse the flocks and result in damage becoming more widespread. He proposes DEC purchase land in the Mordalup/Tonebridge area and decoy feed the birds to alleviate the impacts on surrounding properties.
- Helen Tuckett (Tonebridge) has proposed that in order to assist landowners to fund damage control programs, a select number of export licenses could be granted for Muir's Corellas to be sold overseas or in Australia. The money can then be invested in damage control programs such as purchase of decoy feed, gas cannons, bird frite etc.

Unfortunately anecdotal comment indicates that some land owners may be prepared to take matters into their own hands if the impact of the birds on their farming enterprise and lifestyle is not reduced. This sentiment is obviously detrimental to the likely success of future counts and the survival of the species.

References

Massam, M. (2002) Report on the 'Survey of Western Long-Billed Corellas in the South-west of WA-March 2002', Vertebrate Pest Research Section, Department of Agriculture (confidential internal report-not for circulation)

Massam, M. and Long, J. (1992) Long-billed corellas have an uncertain status in south-west of Western Australia. *W.A. Nat.* 19 (1): 30-34

Muir's Corella (*Cacatua pastinator pastinator*) Recovery Plan 2007-2016 (2007) (WMP 34)

Attachment 1: Letter to Corella Count Participants

Marnie Swinburn
9771 7955
9777 1363
marnie.swinburn@dec.wa.gov.au

Dear

Muir's Corella Count Wednesday 27 February 2008

Thank you to everyone who participated in this year's Muir's Corella Count. Once again, the success of the evening was due to the involvement of a wide section of the community, from landholders, volunteers and Department of Environment and Conservation (DEC) staff.

This year a total of 11200 birds were recorded on 34 properties. This is a slight decrease from what was announced on the night due to the duplication of some results, however, overall there was an increase in the number of corellas counted compared to last year's total of 9350 birds. The increase in birds counted this year is most likely due to the increased survey effort as the number of properties surveyed increased from 22 in 2007 to 34 properties. The aim for future counts is to increase the number of properties surveyed yet again.

We understand that a number of landholders are being impacted by large numbers of Corellas on their property. To assist in mitigating against the impact we have available three gas cannons that can be trialed by landholders to reduce the damage caused by these corellas. Please note a current damage license is required prior to undertaking scaring activities on Muir's Corella. Additionally, an information package with further strategies to reduce the damage caused by these birds will be available in May. Gas cannon bookings and damage licenses can be obtained by telephoning Manjimup DEC Office on 9771 7988.

If you have any questions regarding the information in this letter or any other Muir's Corella matter, please contact Marnie Swinburn or Brad Barton on 97717988.

Yours sincerely

PETER KEPPEL
REGIONAL MANAGER
WARREN REGION

Attachment 2: Media Release



Department of Environment and Conservation
Government of Western Australia

Media Statement

7 May 2008

Corella count well supported

Almost 2000 more birds were recorded during this year's Muir's Corella Count held in the State's south-west in February.

A total of 11,200 birds were counted during the survey. Last year, 9350 birds were recorded in what was the first simultaneous ground survey of Muir's corellas.

DEC Warren Region Fauna Conservation Officer Marnie Swinburn, who is based in Manjimup, said the increase was thought to be the result of an increased survey effort rather than necessarily a real increase in the population size of this restricted species.

"Last year, 55 people surveyed 22 properties. This year, about 60 people, including landholders, volunteers and Department of Environment and Conservation (DEC) staff, surveyed 34 properties across Manjimup, Cranbrook, Plantagenet, Boyup Brook and Kojonup shires," she said.

"Muir's corella (*Cacatua pastinator pastinator*), is endemic to south-west WA. It once occurred across most of the south-west but is now confined to a single population near Lake Muir, Boyup Brook, Perup River, Frankland and Rocky Gully.

"The surveys play an important role in the reassessment of the conservation status of this threatened bird," Ms Swinburn said.

It is estimated that five years worth of data will be required to confirm the status of Muir's corella which is a sub-species of the western long-billed corella. Muir's corella is currently listed as vulnerable under Commonwealth threatened species legislation, and is specially protected under State legislation.

Both surveys were supported by the South West Catchments Council.

For more information about Muir's corellas, contact Marnie Swinburn or Brad Barton at DEC on 9771 7988.

Media contact: 6467 5555