

BANDING PROJECT REPORT

No.1

Agnes Banks Nature Reserve, New South Wales

(Supplementary Data)

Aim: Ornithological research at Agnes Banks Nature Reserve is a component of a longitudinal study to document and then monitor the avian faunas in the north-western section of the remnant Cumberland Plain woodland communities. Other sites included in this study are: Scheyville National Park, Prospect Nature Reserve, Nurringy Reserve and Windsor Downs Nature Reserve. The specific aims are to examine trends in populations of species over time, to determine the status of species locally and to record longevity of species, site fidelity and movements away from the site.

Location: 33° 38' S; 150° 41' E. Elevation 32 metres asl. Approximately 10 kilometres south of Richmond and two kilometres east of the Hawkesbury River.

Description: Agnes Banks Nature Reserve (Fig. 1) conserves 122 hectares of two remnant Cumberland Plain woodland communities^{1,2,3}: Castlereagh Scribbly Gum Woodland (*Eucalyptus sclerophylla* – *E. parramattensis* – *Angophora bakeri* association) and Agnes Banks Woodland (*E. sclerophylla* – *A. bakeri* - *Banksia serrata* association). The former is listed as a *Vulnerable Ecological Community*⁴ that is restricted to the Cumberland Plain. Other occurrences of this community can be found at Kemps Creek, Longneck Lagoon and Holsworthy. The latter community is listed as an *Endangered Ecological Community* and is situated on ancient (Pliocene-Pleistocene) wind-blown sand dunes⁵ and covers the western section of

Agnes Banks Nature Reserve (see Fig. 1). It is floristically similar to vegetation found on coastal sand dunes such as those near Myall Lakes³. Of special note is the fact that four species of *Banksia* (*B. serrata*, *B. aemula*, *B. spinulosa* and *B. oblongifolia*) are found in this community¹ and form a dense understorey. The Reserve is relatively flat with no creeks and just a few ephemeral gullies, although, standing water can be found within the quarried area. Nearly all the sand dunes at Agnes Banks have been mined and mining continues adjacent to the northern boundary. The Nature Reserve now contains most of the remaining (~ 10%) sand deposit⁶.

Large areas of adjacent native vegetation are to the east and south of the Reserve but are not protected. The nearest protected areas are Windsor Downs Nature Reserve (~8 kms to the east) and Castlereagh Nature Reserve (~ 5 kms to the south-east). Large predominantly semi-rural blocks separate all three reserves.

Prior to our study a portion of the Agnes Banks Nature Reserve beside Rickards Road was burnt, although, because of its small area there would have been little effect on the avian fauna.

Status: Agnes Banks Nature Reserve was gazetted in 1982.

Duration of Project: December 1998 – June 2001 (31 months – 1st study period); August 2008 – July 2009 (12 months – 2nd study period). Banding was not carried out in January and March 1999, April 2000 and February 2009 due to inclement weather.

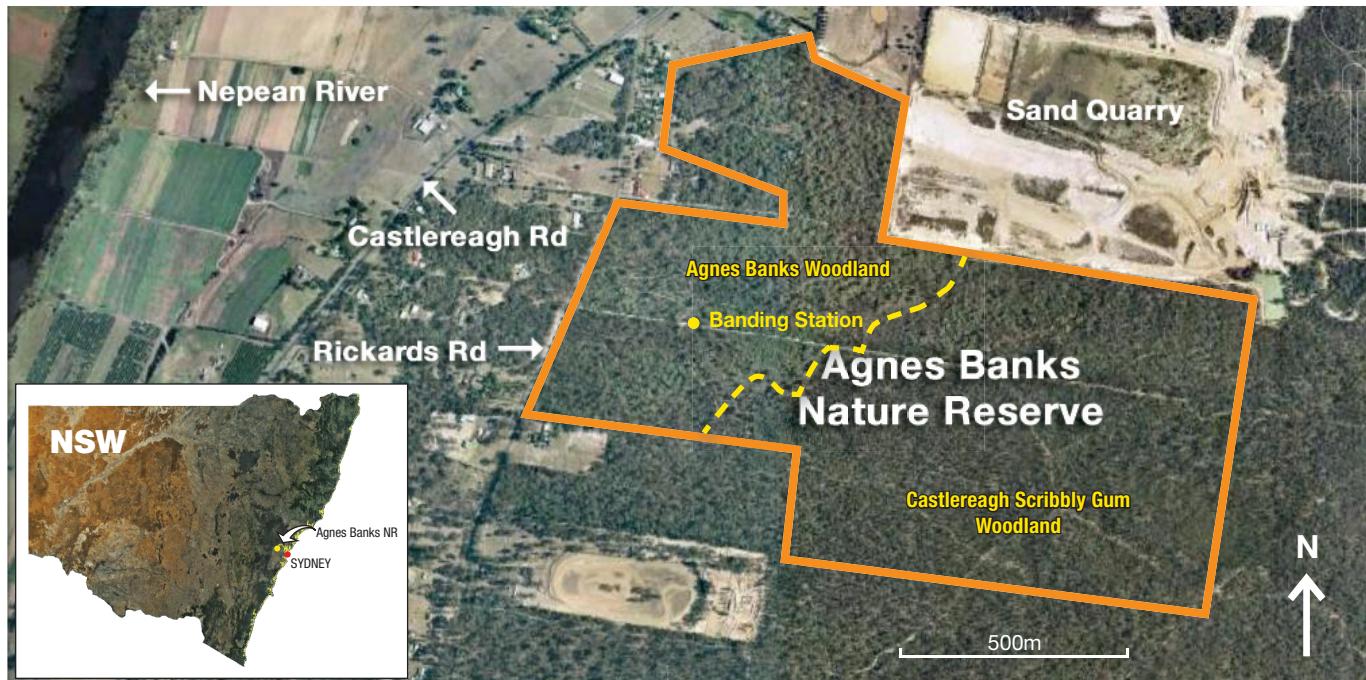


Figure 1. Satellite image of Agnes Banks Nature Reserve and adjacent sand quarry. Image courtesy of Google Earth.

TABLE 1

Capture rates and incidental records of bird species at Agnes Banks Nature Reserve from December 1998 – June 2001 and August 2008 – July 2009.

Common Name	Scientific Name	1st Study Period												2nd Study Period												% re-trapped			
		D	F	A	M	J	J	A	S	O	N	D	J	F	M	M	J	A	S	O	N	D	J	M	A	M	J		
Spotted Dove	<i>Sturnopelia chinensis</i>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	1	0
Peaceful Dove	<i>Geopelia striata</i>	●	0.2	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	9	0
Horsfield's Bronze-Cuckoo	<i>Chalcites basalis</i>	●	0.2	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	5	0
Shining Bronze-Cuckoo	<i>Chalcites lucidus</i>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	4	0
Fantailed Cuckoo	<i>Caconotus flabelliformis</i>	0.1	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	4	0
Laughing Kookaburra	<i>Dacelo novaeguineae</i>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	4	0
Sacred Kingfisher	<i>Todiramphus sanctus</i>	0.1	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	6	16.7
White-throated Treecreeper	<i>Cornuhabia leucophaea</i>	0.6	0.7	0.2	0.5	0.8	0.4	0.2	0.1	0.1	0.2	0.5	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	45	40.0
Superb Fairy-wren	<i>Malurus cyaneus</i>	0.6	0.7	0.1	0.1	0.5	0.2	0.1	●	●	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	25	40.0
Variegated Fairy-wren	<i>Malurus lamberti</i>	0.1	0.1	0.1	0.5	0.2	0.1	●	●	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.3	●	0.3	0.3	25	40.0	
White-browed Scrubwren	<i>Sericornis frontalis</i>																										3	66.7	
Chestnut-rumped Heathwren	<i>Calamantis pyrrhopygia</i>																										1	0	
Weebill	<i>Smicrornis brevirostris</i>																										1	0	
White-throated Gerygone	<i>Gerygone albogularis</i>																										1	0	
Striated Thornbill	<i>Acanthiza lineata</i>																										14	50	
Yellow Thornbill	<i>Acanthiza nana</i>	●	0.2	0.2	0.1	0.5	0.2	●	●	●	●	0.2	0.2	●	●	●	●	●	●	●	●	●	●	●	●	●	●	21	38.1
Brown Thornbill	<i>Acanthiza pusilla</i>	0.2	0.3	0.1	0.2	0.3	0.1	0.3	0.2	●	0.2	0.1	0.2	0.4	0.2	0.1	0.3	0.2	●	●	●	●	●	●	●	●	32	37.5	
Spotted Pardalote	<i>Pardalotus punctatus</i>	●	0.1	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	17	0
Striated Pardalote	<i>Pardalotus striatus</i>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	5	20.0
Eastern Spinebill	<i>Acanthorhynchus tenuirostris</i>	0.1	2.0	0.6	0.5	0.2	0.2	0.1	●	●	0.1	0.2	0.4	0.6	0.5	●	0.3	0.1	0.2	0.1	0.3	0.2	0.1	0.3	0.1	0.1	150	12.0	
Lewin's Honeyeater	<i>Meliphaga lewinii</i>	0.3	0.2	1.7	0.2	0.1	0.3	1.0	0.1	0.1	0.1	0.2	0.7	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1	0	
Yellow-faced Honeyeater	<i>Lichenostomus chrysops</i>	0.1	0.1	0.4	0.2	0.2	0.2	0.4	0.3	0.1	0.1	0.2	0.5	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	126	4.8	
White-eared Honeyeater	<i>Lichenostomus leucotis</i>																										94	17.0	
Fuscous Honeyeater	<i>Lichenostomus fuscus</i>																										2	0	
White-plumed Honeyeater	<i>Lichenostomus penicillatus</i>	0.1																									1	0	
Little Wattlebird	<i>Anthochaera chrysoptera</i>																										4	0	
Scarlet Honeyeater	<i>Myzomela sanguinolenta</i>	●	0.3																								13	0	
Crescent Honeyeater	<i>Phylidonyris pyrrhopterus</i>	0.1	0.3	1.0	0.2	0.2	●	●	0.5	0.2	0.4	0.5	0.6	1.3	0.9	0.1	0.3	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	1	0		
White-cheeked Honeyeater	<i>Phylidonyris niger</i>	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	106	17.9		
Brown-headed Honeyeater	<i>Melithreptus brevirostris</i>																										15	0	
White-naped Honeyeater	<i>Melithreptus lunatus</i>																										1	0	
Noisy Friarbird	<i>Philemon corniculatus</i>	●	0.4	0.6	0.2	0.2	0.1	●	●	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	13	0		
Golden Whistler	<i>Pachycephala pectoralis</i>	0.8	0.6	0.6	0.2	0.1	0.1	0.1	0.4	0.4	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	25	24.0		
Rufous Whistler	<i>Pachycephala rufiventris</i>	●	0.4	0.1	0.1	●	●	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	51	21.6		
Grey Shrike-thrush	<i>Colluricinclla harmonica</i>	●	0.1	0.1	0.2	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	21	33.3	
Rufous Fantail	<i>Rhipidura rufifrons</i>	0.6	0.1	0.2	●	●	●	●	0.2	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	3	0		
Grey Fantail	<i>Rhipidura albiscapa</i>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	47	12.8	
Willie Wagtail	<i>Malurus cyaneus</i>																										2	0	
Rose Robin	<i>Petroica rosea</i>																										2	0	
Eastern Yellow Robin	<i>Eopsaltria australis</i>	1.3	0.5	0.6	0.9	0.3	0.4	0.2	0.4	0.1	0.5	0.7	0.5	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	3	33.3		
Silveryeye	<i>Zosterops lateralis</i>	0.5	0.4	1.5	0.2	0.2	0.2	●	1.1	0.8	0.5	0.2	0.1	0.3	0.3	0.3	0.2	0.2	0.9	0.5	0.5	0.2	0.1	0.1	0.1	133	18.8		
Red-whiskered Bulbul	<i>Pycnonotus jocosus</i>																										2	0	
Common Blackbird	<i>Turdus merula</i>																										2	0	
Mistletoebird	<i>Dicaeum hirundinaceum</i>	●																									4	0	
Double-barred Finch	<i>Taeniopygia bichenovii</i>	0.1	0.2	●	0.2	●	0.2	0.3	0.2	0.3	0.2	0.5	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	45	33.3		
Red-browed Finch	<i>Neochmia temporalis</i>	0.1	0.1	3.7	10.1	3.3	3.8	2.8	2.5	3.0	3.3	4.0	3.4	4.4	2.7	2.4	1.9	2.7	2.5	3.1	3.8	2.9	6.8	5.6	1.5	0.9	31	97	
TOTAL		5.3	0.1	10.1	3.5	3.3	3.8	2.8	2.5	3.0	3.3	4.0	3.4	4.4	2.7	2.4	1.9	2.7	2.5	3.1	3.8	2.9	6.8	5.6	1.5	0.9	311	192	

* Sighting records for Aug 08 were lost
 2.4 = Capture Rate (No./100m of net/hr)
 ● = Species sighted or heard on banding day
 ■ = Species not recorded in 1st Study Period
 □ = Species not recorded in 2nd Study Period

Previous Records: The Cumberland Bird Observers Club (CBOC) Bird Atlas Database includes records for Agnes Banks Nature Reserve dating from mid-1991 to the present. A rather restricted bird list was presented in a publication by Fairly and Waterhouse⁷ in 2005, in which they described a number of reserves and parks across western Sydney.

METHODS

Banding was carried out on the second Sunday each month when weather permitted. On most occasions 15 nets (mesh size 31mm) were erected totalling 234 metres in length by 2.7 metres high and were open from sunrise for an average of 5.2 hours (range 3–5.5 hours). All nets were situated within the Agnes Banks Woodland and erected in the same positions along established tracks to the north, east and south of the banding station (Fig. 1). Birds were individually marked using numbered bands supplied by Australian Bird and Bat Banding Schemes (ABBBS).

Capture rates are presented as the number of birds trapped per 100 metres of net per hour. Any bird that was caught subsequent to the banding day was considered to be a 're-trap' regardless of the number of times that bird was caught or the length of time that had elapsed between banding and recapture. The 're-trap' percentage for each species was then calculated by dividing the number of re-trapped birds by the total number banded for that species and multiplying by 100. Birds frequenting the site (both within the Agnes Banks Woodland and Castlereagh Scribbly Gum Woodland communities) were also recorded incidentally, either by sight or call, on each banding day.

RESULTS AND DISCUSSION

Ninety-five species were recorded in Agnes Banks Nature Reserve during this study (Table 1; Appendix). Capture rates of all species banded in addition to those sighted are presented in Table 1. Many species were residents and regularly seen and/or captured during our study (Table 1; Appendix). Species

recorded at the site in the first study period and not in the second study period (and vice versa) are highlighted on Table 1 and the Appendix. Thirteen species that were not observed during our study are listed for the Reserve in the CBOC Bird Atlas Database (Table 2).

The total number of birds caught was very low during the last few months of our study. This may have been due to below average rainfall in 2009 but similar rainfall figures were experienced in 2000 which didn't adversely affect capture rates (Fig. 2).

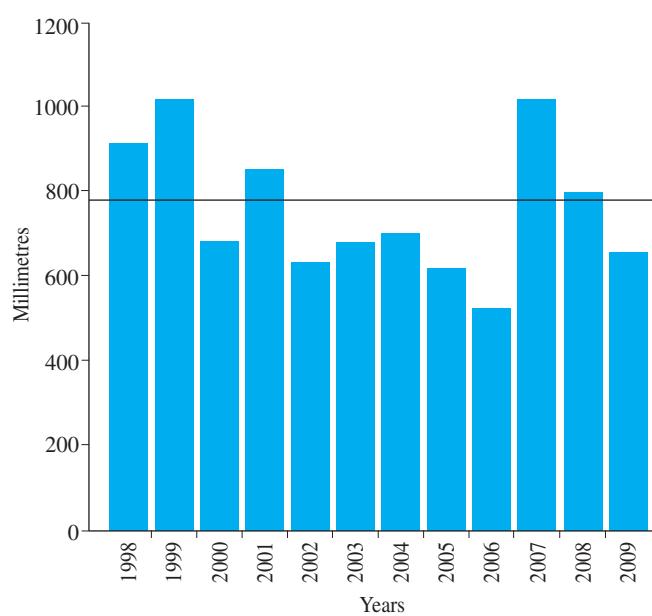


Figure 2. Yearly rainfall (mm) for Richmond – UWS Hawkesbury recording station approximately nine kilometres north of Agnes Banks Nature Reserve. Line indicates average yearly rainfall for this station¹³.

TABLE 2

Birds sighted at Agnes Banks Nature Reserve (by year) and listed in the Cumberland Bird Observers Club Bird Atlas Database but not recorded during this study.

Species	1991	1995	1998	1999	2000	2001	2002	2003	2004	2006	2007
Brown Quail									x		
Rock Dove					x						
Common Bronzewing								x			
Great Cormorant							x				
Pacific Baza										x	
Collared Sparrowhawk									x		
Swamp Harrier											x
Peregrine Falcon						x					
Yellow-rumped Thornbill											x
Buff-rumped Thornbill	x		x		x				x	x	x
Yellow-tufted Honeyeater								x			
New Holland Honeyeater	x		x		x			x			
Zebra Finch	x										
No. of visits to Agnes Banks Nature Reserve	2	1	2	1	1	2	9	11	5	4	1

TABLE 3

Most commonly trapped species at Agnes Banks Nature Reserve in the year from August 1999 to July 2000, August 2000 to June 2001 and August 2008 to July 2009. n = total number trapped; % = percentage of the total number of birds trapped in each period.

Species	Aug. 99 - July 00		Aug. 00 - June 01		Aug. 08 - July 09	
	n	%	n	%	n	%
Silvereye	68	14.8	48	13.5	26	6.9
White-cheeked Honeyeater	62	13.5	20	5.6	23	6.1
White-eared Honeyeater	40	8.7	16	4.5	51	13.6
Eastern Yellow Robin	39	8.5	30	8.5	46	12.3
Superb Fairy-wren	32	7.0	8	2.3	6	1.6
Eastern Spinebill	30	6.5	40	11.3	51	13.6
Yellow-faced Honeyeater	26	5.7	21	5.9	44	11.7
Double-barred Finch	26	5.7	24	6.8	1	0.3
Brown Thornbill	22	4.8	20	5.6	14	3.7
Rufous Whistler	20	4.4	22	6.2	23	6.1
Grey Fantail	14	3.1	23	6.5	5	1.3
Yellow Thornbill	11	2.4	9	2.5	2	0.5
Golden Whistler	9	2.0	9	2.5	5	1.3
Variegated Fairy-wren	8	1.7	4	1.1	16	4.3
Noisy Friarbird	8	1.7	0	0	0	0
Red-browed Finch	5	1.1	13	3.7	1	0.3
Striated Thornbill	3	0.7	8	2.3	10	2.6

Of the most captured 17 species during the first and second study periods (Table 3) of our study five nectarivorous species were among the top seven species. Although, towards the end of the first study period the percentage of White-cheeked *Phylidonyris niger* and White-eared *Lichenostomus leucotis* Honeyeaters was lower than several insectivorous species. Nectarivorous species increased from 47 per cent of all birds captured in the first study period to 58 percent in the second study period, while insectivorous species decreased from 44 percent to 41 percent.

Re-traps

Re-trap percentages for all banded species are presented in Table 1. The total re-trap percentage for all species was 19.2. Although the majority of birds banded during 1998–2001 were honeyeaters (Fig. 3) none of these were re-trapped on our return in 2008–2009.

Only five birds banded during our first study period were re-trapped during the second study period – one Golden *Pachycephala pectoralis* and two Rufous Whistlers *P. rufiventris* (see Movements Section) and two Eastern Yellow Robins *Eopsaltria australis*. During the first study period one robin was trapped five times over a 2½-year period and the other four times over a two-year period prior to their recapture during the second study period. Eastern Yellow Robins are resident at the site, as highlighted by their high re-trap percentage and the recapture of the two birds referred to above.

The time between banding and re-trap (on a monthly basis) of all species recaptured is presented in Table 4 with the maximum time highlighted in bold.

Movements

Overall capture rates (Table 1) show a marked increase during March and/or April. This is a reflection of the influx of many nectarivores into the Reserve, which coincided with the blooming of the four species of *Banksia* – see Figure 3.

No birds captured at Agnes Banks Nature Reserve were subsequently recorded away from the site. Of the migratory/partial migratory species the Sacred Kingfisher *Todiramphus sanctus* banded was re-trapped only one month after banding while a single Rose Robin *Petroica rosea* was re-trapped in the following season, 11 months after banding (Table 4).

Movements of Golden and Rufous Whistlers are poorly understood with some populations of both species appearing to be resident while others are migratory (Higgins and Peter 2002)⁸. Golden Whistlers generally arrive at Agnes Banks in April/May and depart in September/October while Rufous Whistlers arrive in September/November and depart in March/April (Table 1). It appears that when Rufous Whistlers arrive at the site most of the Golden Whistlers depart. The only discrepancy to this occupational overlap that we observed was one first-year Golden Whistler, which was trapped in December 1999 and again in January 2000. Whether this replacement is a breeding territory or food resource conflict between two very similar species, or representative of a general pattern of movement could not be determined in this study.

Re-trap data (Table 1) show that 24 percent (n=25) of Golden Whistlers either stay at the banding site during the season in which they were banded or return to the banding site in subsequent seasons – four returned the following season after banding; one returned for two consecutive seasons; one

returned the season after banding and then was re-trapped 10 years later⁹. Re-trap data for the Rufous Whistlers show a somewhat similar pattern with 21.6 percent ($n=51$) either staying at the banding site during the season in which they were banded or returning to the banding site in subsequent seasons – 10 returned the following season after banding; two returned for two consecutive seasons; one returned in the season two years from banding; one returned in the season nine years after banding¹⁰; one returned in the season 11 years after banding¹⁰. This is a high rate of return for both species in comparison to re-trap data for other migrant/partial migrants (e.g. Rose Robin and Rufous Fantail *Rhipidura rufifrons*).

Changes from first to second study period

Twenty-six species that were recorded in 1998–2001 were not recorded in the 2008–9 period (see highlighted species in Table 1). Many of these were single captures or sightings and may have been individual birds just passing through the area.

Of special note was the absence of any records of the Gang-gang Cockatoo *Callocephalon fimbriatum* in the Reserve since 2001. This coincides with reduced sightings across the nearby lower Blue Mountains over a number of years (JRF pers. obs.). This species is presently listed as *vulnerable* within the Hawkesbury/Nepean region¹².

White-browed Scrubwrens were not recorded in our study until August 2000 and then not seen after April 2001. Only a small number of individuals was observed at any one time so they may simply have died out or moved away from our banding area. This scenario could also apply to the Crested Shrike-tit *Falcunculus frontatus* which was only sighted from December 1999 to June 2000 and the Varied Sittella *Daphoenositta chrysoptera* which was sighted intermittently during the first study period but not at all during the second study period.

Of the five introduced species recorded in the Reserve the Spotted Dove *Streptopelia chinensis*, Common Blackbird *Turdus merula* and Common Starling *Sturnus vulgaris* were not recorded in our second study period while the Red-whiskered Bulbul *Pycnonotus jocosus* and Common Myna *Sturnus tristis* were recorded less frequently.

The disappearance of the Double-barred Finch *Taeniopygia bichenovii* from our banding site and the reduction in capture rate and sightings of the Red-browed Finch *Neochmia temporalis* were noted. The Double-barred Finch was regularly trapped during our first study period but not trapped or observed during the second study period. The CBOC Bird Atlas Database records sightings of this species on a yearly basis from 1998–2004 but doesn't include the number of birds seen. The Red-

TABLE 4

Months between banding and recapture of species at Agnes Banks Nature Reserve including both first and second study periods. Maximum times are highlighted. Birds banded in first study period and then captured in the second study period are not included (Golden and Rufous Whistlers and Eastern Yellow Robins – see text). Totals include multiple captures of individual birds.

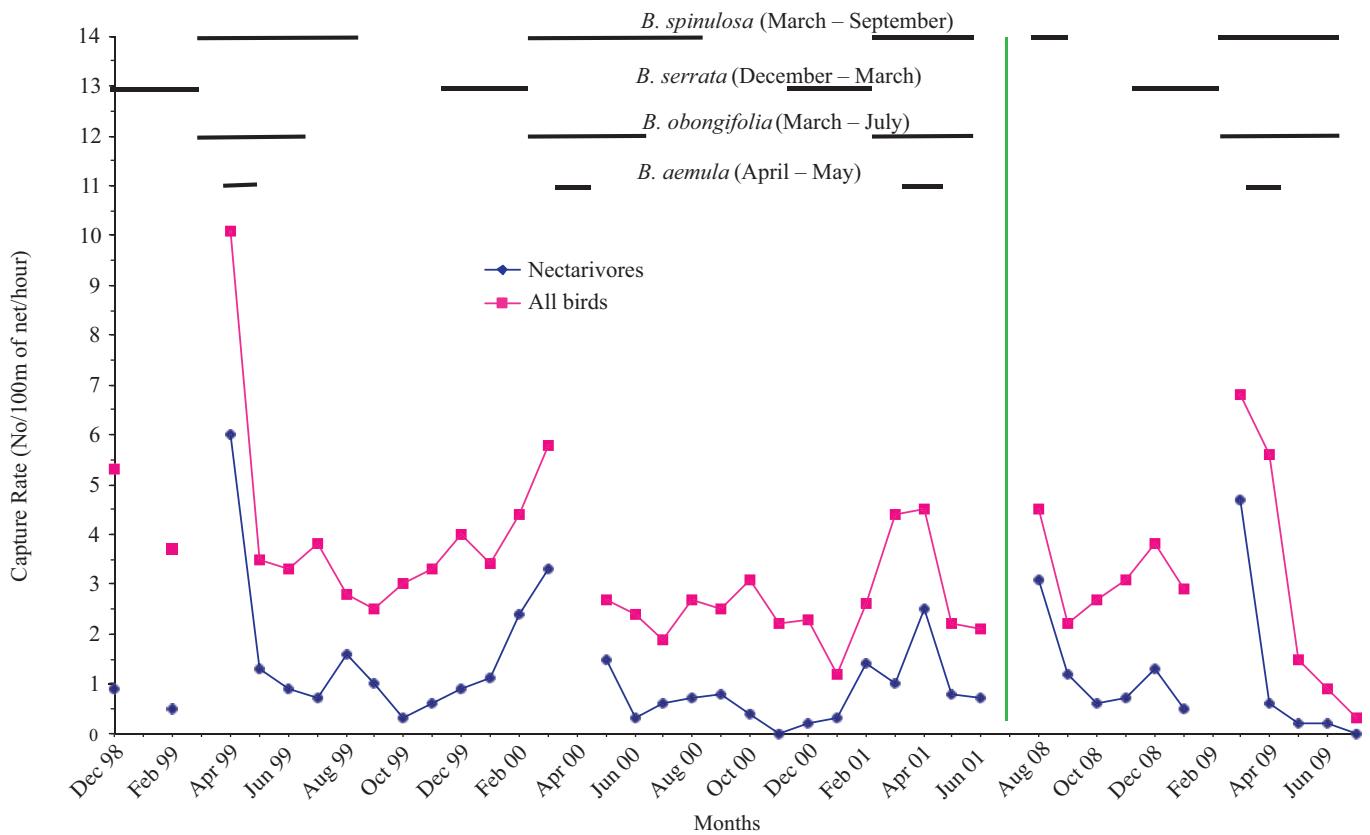


Figure 3. Capture rates of all species and those of all nectarivores banded at Agnes Banks Nature Reserve from December 1998 – June 2001 and August 2008 – July 2009 in addition to the flowering periods¹⁴ of the four species of Banksia present at the site.

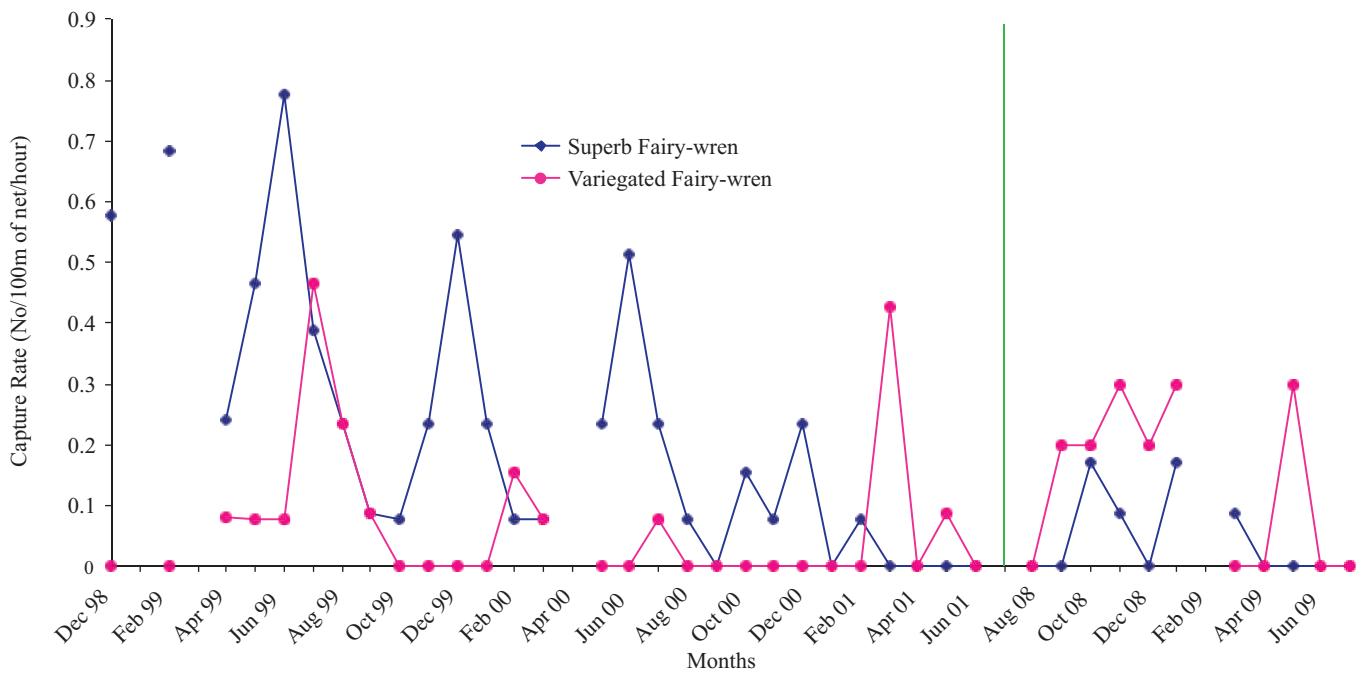


Figure 4. Capture rates of the Superb and Variegated Fairy-wrens at Agnes Banks Nature Reserve from December 1998 – June 2001 and August 2008 – July 2009.

browed Finch has declined in numbers since April 1999 and was captured only once during the second study period. Populations of other finches in the area have declined to the point of local extinction (e.g. Zebra Finch *Taeniopygia guttata* last sighted in the Reserve in 1991 – Table 2) or regional extinction (e.g. Diamond Firetail *Stagonopleura guttata*)¹¹.

The Superb Fairy-wren *Malurus cyaneus* capture rate has shown a gradual decline during the period of our study (Fig. 4 – also see Table 3). The capture rate of the Variegated Fairy-wren *M. lamberti*, however, showed a slight increase during our second visit. Whether the Variegated Fairy-wren is slowly taking over this niche from the Superb Fairy-wren remains to be seen.

The number of sightings of White-cheeked Honeyeaters was much lower on the second study period as was their overall capture rate (Tables 1 and 3). They did however return in comparable numbers during April/May 2009 when the four species of *Banksia* were flowering.

We recorded nine new species during our second study period. Six of these were single occasions (see highlighted species in Table 1). New records include: the capture of a Chestnut-rumped Heathwren *Calamanthus pyrrhopygia*, a rather elusive species; the sightings of the Bar-shouldered Dove *Geopelia humeralis* and the capture and sightings of the Fuscous Honeyeater *Lichenostomus fuscus*. There was also a noticeable increase in the number of sightings of Rainbow *Trichoglossus haematodus* and Little Lorikeets *Glossopsitta pusilla*.

ACKNOWLEDGEMENTS

We wish to thank our associates: Debbie Saunders, Nina Svedin, Catherine Young, Josephine Dessmann, Katy Wilkins, Kim Maute, Mylene Mariette, the late Keith Egan and all the people who assisted on a casual basis. It was always a pleasure to work with such an enthusiastic team. Thanks go to Tony Saunders, Records Officer for the Cumberland Bird Observers Club Bird Atlas Database, for providing sighting records for Agnes Banks Nature Reserve, to the staff of the Australian Bird and Bat Banding Scheme for their support and supplying bands, and to the personnel at the Department of Environment and Climate Change at Scheyville National Park for allowing access to this site. David Drynan gave valuable comments on a draft of this report. A special thanks to Judy and Peter Smith, Alan Leishman and Graham Fry for working with the compilers in designing a format and for assistance in deciding the main aspects to include. Comments on the final draft of this report from Alan Leishman, Catherine Young and James Brazill-Boast were very much appreciated.

BIBLIOGRAPHY

1. Benson, D. H. (1981). Vegetation of the Agnes Banks sand deposit, Richmond, New South Wales. *Cunninghamia* **1**: 35–57.
2. Benson, D. H. (1992). The natural vegetation of the Penrith 1:100 000 map sheet. *Cunninghamia* **2**: 541–596.
3. Tozer, M. (2003). The native vegetation of the Cumberland Plain, western Sydney: systematic classification and field identification of communities. *Cunninghamia* **8**: 1–75.
4. Threatened Species Conservation Act (1995). NSW Government. NSW Legislation. <http://www.legislation.nsw.gov.au/viewtop/inforce/act+101+1995+FIRST+O+N/> Accessed 22/6/2012.
5. Gobert, V. (1978). Proposed nomenclature for the Cainozoic sediments of the Penrith-Windsor area. *Quarterly notes of the Geological Survey of New South Wales* **32**: 1–9.
6. National Parks and Wildlife (1988). ‘Castlereagh, Agnes Banks and Windsor Downs Nature Reserves - Plan of management’. (NSWNPWS: Sydney)
7. Fairly, A. and Waterhouse, D. (2005). ‘Exploring Nature in Sydney’s Western Suburbs: West Sydney Wild’. (Rosenberg Publishing Pty Ltd: Dural, NSW.)
8. Higgins, P. J. and Peter, J. M. (Eds) (2002). ‘Handbook of Australian, New Zealand and Antarctic Birds, Volume 6, Pardalotes to shrike-thrushes’. (Oxford University Press: Melbourne.)
9. Anon. (2010). Recovery Roundup. *Corella* **34**: 24.
10. Anon. (2009). Recovery Roundup. *Corella* **33**: 24.
11. Department of Environment and Conservation (2012). http://threatenedspecies.environment.nsw.gov.au/tsprofile/profile_data.aspx?id=10975&cma=Hawkesbury/Nepean. Accessed 24/01/2012.
12. Egan, K., Farrell, J. R. and Pepper-Edwards, D. (1997). Historical and seasonal changes in the population of forest birds at Longneck Lagoon Nature Reserve, Scheyville, New South Wales. *Corella* **21**: 1–16.
13. Bureau of Meteorology. Climate statistics for Australian locations. http://www.bom.gov.au/climate/averages/tables/cw_067021.shtml. Accessed 26/6/2012.
14. Robinson, L. (1991). ‘Field Guide to the Native Plants of Sydney’. (Kangaroo Press: Sydney.)

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APPENDIX

Incidental records of bird species at Agnes Banks Nature Reserve from December 1998 – June 2001 and August 2008 – July 2009.

Common Name	Scientific Name	1st Study Period												2nd Study Period														
		D	F	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	A	S	O	N	D	J	M	A	M	J
Australian Wood Duck	<i>Chenonetta jubata</i>	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Pacific Black Duck	<i>Anas superciliosa</i>																											
Bar-shouldered Dove	<i>Geopelia humeralis</i>																											
White-throated Nightjar	<i>Eurostopodus mystacalis</i>	●																										
Australian Owl-eating-nightjar	<i>Aegotheles cristatus</i>	●																										
White-throated Needletail	<i>Hirundapus caudacutus</i>																											
Brown Goshawk	<i>Accipiter fasciatus</i>	●																										
Wedge-tailed Eagle	<i>Aquila audax</i>																											
Brown Falcon	<i>Falco berigora</i>																											
Purple Swamphen	<i>Porphyrio porphyrio</i>																											
Black-fronted Dotterel	<i>Elseyornis melanops</i>																											
Masked Lapwing	<i>Vanellus miles</i>																											
Painted Button-quail	<i>Turnix varius</i>																											
Yellow-tailed Black-Cockatoo	<i>Calyptorhynchus funereus</i>																											
Gang-gang Cockatoo	<i>Callocephalon fimbriatum</i>																											
Galah	<i>Eolophus roseicapillus</i>																											
Little Corella	<i>Cacatua sanguinea</i>																											
Sulphur-crested Cockatoo	<i>Trichoglossus haematocephalus</i>																											
Rainbow Lorikeet	<i>Glossopsitta elegans</i>																											
Little Lorikeet	<i>Platycercus elegans</i>																											
Crimson Rosella	<i>Platycercus eximius</i>																											
Eastern Rosella	<i>Eudynamys orientalis</i>																											
Eastern Koel	<i>Scythrops novaehollandiae</i>																											
Channel-billed Cuckoo	<i>Coacomantis pallidus</i>																											
Pallid Cuckoo	<i>Coacomantis variolosus</i>																											
Brush Cuckoo	<i>Ninox novaeseelandiae</i>																											
Southern Boobook	<i>Merops ornatus</i>																											
Rainbow Bee-eater	<i>Eurystomus orientalis</i>																											
Dollarbird	<i>Manorina melanocephala</i>																											
Noisy Miner	<i>Anthochaera carunculata</i>																											
Red Wattlebird	<i>Psophodes olivaceus</i>																											
Easter Whistler	<i>Daphoenostila chrysopera</i>																											
Vaned Stittella	<i>Coracina novaehollandiae</i>																											
Black-faced Cuckoo-shrike	<i>Coracina papuensis</i>																											
White-bellied Cuckoo-shrike	<i>Falcunculus frontatus</i>																											
Crested Shrike-tit	<i>Oriolus sagittatus</i>																											
Olive-backed Oriole	<i>Ariamnes cyanocephalus</i>																											
Dusky Woodswallow	<i>Cracticus torquatus</i>																											
Grey Butcherbird	<i>Cracticus tibicen</i>																											
Australian Magpie	<i>Strepera graculina</i>																											
Pied Currawong	<i>Corvus coronoides</i>																											
Australian Raven	<i>Myiagra rubecula</i>																											
Leaden Flycatcher	<i>Grallina cyanoleuca</i>																											
Magpie-lark	<i>Corcorax melanorhamphos</i>																											
White-winged Chough	<i>Hirundo neoxena</i>																											
Welcome Swallow	<i>Petrochelidon ariel</i>																											
Fairy Martin	<i>Sturmus vulgaris</i>																											
Common Starling	<i>Sturnus tristis</i>																											
Common Myna																												

● = Species sighted or heard on banding day

■ = Birds not previously recorded at this site

* Sighting records for Aug 08 were lost

■ = Species not recorded in 1st Study Period

■ = Species not recorded in 2nd Study Period