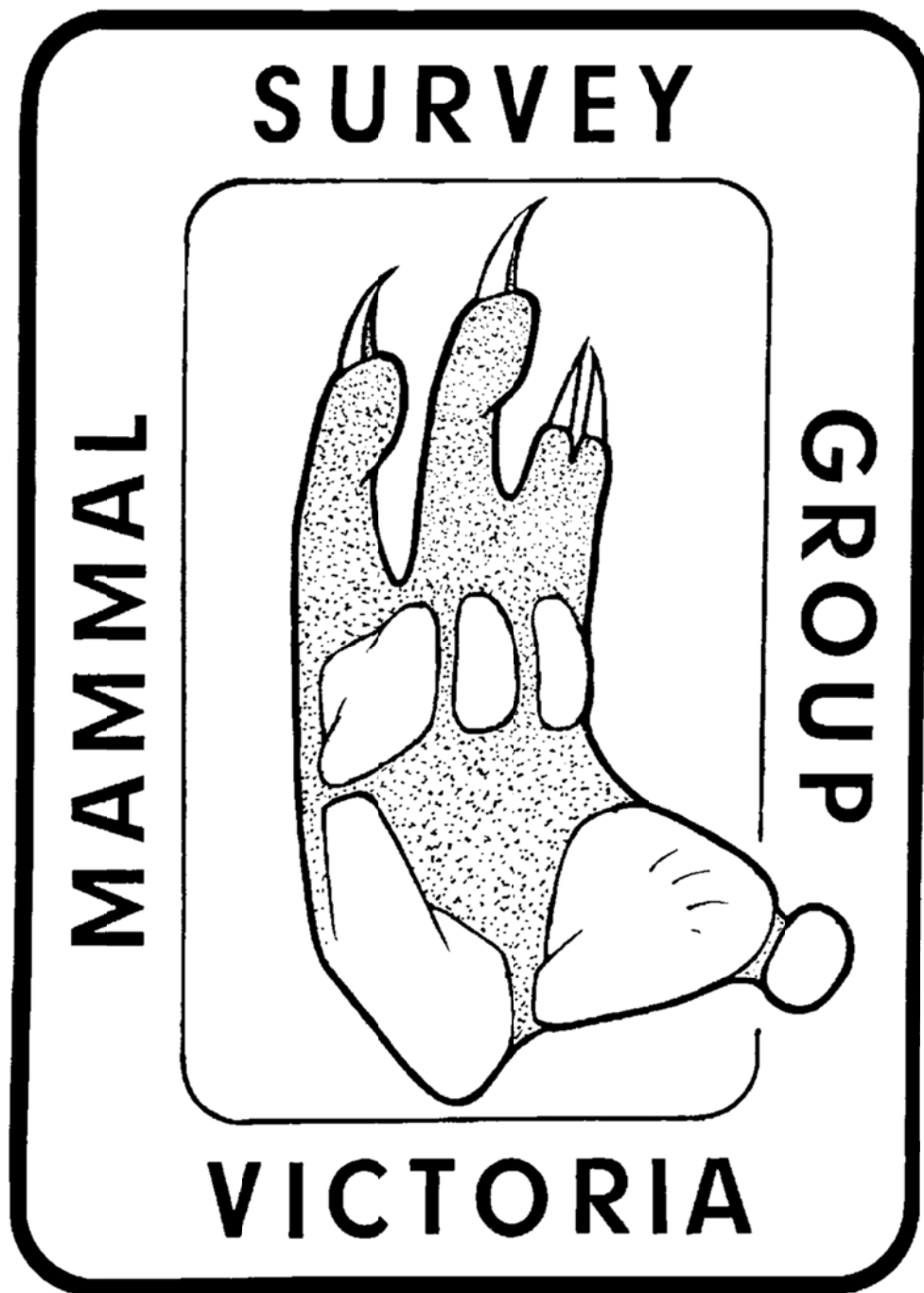


**MAMMAL SURVEY GROUP OF VICTORIA INC.**  
***SURVEY CAMP REPORT***



March 2016

# SURVEY AT DOUG FENWICK RESERVE

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The Doug Fenwick Reserve Management Committee invited the Mammal Survey Group of Victoria (MSGV) to return to the forest reserve site that it previously surveyed 34 years ago in Apr 1982. At that time 13 native species of mammals were recorded including significant findings of Long-nosed Potoroos (*Potorous tridactylus*) and White-footed Dunnart (*Sminthopsis leucopus*). Although these particular species appear to have since disappeared from the reserve, it still supports a rich diversity of healthy native fauna. One of the highlights of this survey was the confirmed presence of the listed threatened Rufous Bristlebird (*Dasyornis broadbenti*).

## Survey Report

The Doug Fenwick Reserve was surveyed between 11-15 Mar 2016. Good weather prevailed over this time with the following observations; Saturday morning was cloudy, some drizzle, clearing to a fine and mild clear afternoon with light winds. Sunday was fine and mild. Max day time temp 20°C (Sat). Min overnight temp 16°C (Sat/Sun).

## Survey site

The Doug Fenwick Reserve is located south of Nirranda on Baileys Rd in South Western Victoria (-38.522600, 142.775062) at an altitude of about 50 metres (Figure 9).

MSGV previously surveyed the reserve and surrounding areas 34 years ago. At that time 13 native species of mammals were recorded including significant findings of Long-nosed Potoroos (*Potorous tridactylus*) (nine) and a White-footed Dunnart (*Sminthopsis leucopus*) (MSGV 1982).

The reserve is surrounded by grazing farmland and can be described as remnant coastal woodland on sandy soils. Vegetation chiefly consists of an overstorey of Messmate (*Eucalyptus obliqua*) with some Manna Gum (*Eucalyptus viminalis*) present. Blackwood (*Acacia melanoxylon*), Prickly Moses (*Acacia verticillata*), other Wattles (*Acacia* spp.), Scented Paperbark (*Melaleuca squarrosa*), Prickly Tea-tree (*Leptospermum juniperinum*), chest and head-height Austral Bracken (*Pteridium esculentum*), some Grass-trees (*Xanthorrhoea australis*), some Silver Banksia (*Banksia marginata*), sedges, grasses, fungi and mosses, make up the understorey and ground cover (Figure 13).

## Results

A total of 55 fauna species were recorded during the survey period. This consisted of nine mammals, 44 birds, and two herpers.

No bat traps were set during this survey due to the windy conditions and the low number of personnel.

17 MSGV or personally-owned motion-sensing cameras were deployed at varying sites within the reserve between 11-15 Mar (Figure 10). All cameras were placed and set with bait at a chosen site for one or two night duration. Nine of the 17 cameras captured still images or

video footage of animals. A total of 46 camera nights (including partial day time recordings) revealed a total of three mammal and four bird species. This included five Bush Rats (*Rattus fuscipes*), two House Mouse (*Mus musculus*), four Black Wallaby (*Wallabia bicolor*) (one with pouch young), two Superb Fairy-wrens (*Malurus cyaneus*), a Rufous Bristlebird (*Dasyornis broadbenti*), an Eastern Yellow Robin (*Eopsaltria australis*), and a White Browed Scrub-wren (*Sericornis frontalis*) (Figures 1-4).



**Figure 1.** Black Wallaby (*W. bicolor*) with pouch young captured on Ltl Acorn camera (Credits: Nancy McMurray).



**Figure 2.** Bush Rat (*R. fuscipes*) captured on SG2 camera (Credits: Nancy McMurray).





**Figure 3.** Rufous Bristlebird (*D. broadbenti*) captured on Ltl Acorn camera-fog12 (Credits: Duncan Frost).



**Figure 4.** Black Wallaby (*W. bicolor*) captured on KG1 camera (Credits: Nancy McMurray).

Cage trapping was undertaken between 12-14 Mar (Sat-Mon) on the northern side, and the north-eastern, the south-eastern, and the south-western, sections of the reserve (Figure 10). A total of 28 traps were set with baits at chosen sites for one or two night duration. Some of the traps were left open during the day (on Sun). Only night trapping in the central and north-eastern sections yielded success, with four Bush Rats (*R. fuscipes*) (Figure 5) captured from 46 trap nights and ten trap days. This represents a night trapping rate of 8.7%.



**Figure 5.** Bush Rat (*R. fuscipes*) being released on Sun morning (Credits: Chris Wilson).

Spotlighting on Sat evening was undertaken between 8:30pm and 10:10pm (Figure 11). A circumnavigation of the reserve using Baileys Rd and the perimeter tracks was completed using two hand-held spotlights. A total of 3.33 spot hours revealed 36 Common Ringtail Possum (*Psuedocheirus perigrinus*) (Figure 6), one Koala (*Phascolarctos cinereus*) (Figure 7), four Common Brushtail Possum (*Trichosurus vulpecula*), one Black Wallaby (*W. bicolor*), one Masked Lapwing (*Vanellus miles*), one unidentified tree frog (*Litoria sp.*) (Figure 8), seven unidentified microbats and one macropod heard. The total number of mammals seen spotlighting on Sat was 42. This represents a spotting rate of 12.6 mammals per spot hour.

Spotlighting on Sun evening was undertaken along Baileys Rd and the northern boundary of the reserve using one spotlight (Figure 12). A total of one spot hour revealed one Koala (*P. cinereus*), 14 Common Ringtail Possum (*P. perigrinus*), two unidentified bats, and two unidentified owls, possibly Tawny Frogmouth (*Podargus strigoides*). The total of number of mammals seen spotlighting on Sun was 15. This represents a spotting rate of 15 mammals per spot hour.



**Figure 6.** Spotlighting of Common Ringtail Possum (*P. peregrinus*) (Credits: Paul Sparks).



**Figure 7.** Daytime sighting of a Koala (*P. cinereus*) (Credits: Paul Sparks).



**Figure 8.** Daytime sighting of a tree frog, family Hylidae, possibly Whistling Tree Frog (*Litoria verreauxi*) (Keith Ward 2016, pers. comm., 1 Sep), or Southern Tree Frog (*L. ewingii*) - identification unconfirmed (Credits: Paul Sparks).

Incidental mammal sightings during the survey period included one Short-beaked Echidna (*Tachyglottus aculeatus*), one Koala (*P. cinereus*) (Figure 7), 21 Eastern Grey Kangaroos (*Macropus giganteus*), and four Black Wallaby (*W. bicolor*). Signs of mammals included a macropod skull, skeletal remains of an Eastern Grey Kangaroo (*M. giganteus*), and the skull of a Sheep (*Ovis*

*aries*). The bird life was particularly diverse (Appendix 1), and included a significant recording of a Rufous Bristlebird (*D. broadbenti*) as footage on one of the remote video cameras. The Rufous Bristlebird in Victoria is listed as threatened under the Victorian Flora and Fauna Guarantee Act of 1988 (DSE 2003).

### Mammals Observed

Nine mammal species were recorded including seven native and two introduced species (Table 1). It would appear that the Long-nosed Potoroo (*P. tridactylus*) and White-footed Dunnart (*S. leucopus*) species captured in 1982 have since disappeared from the reserve.

### Birds Observed

44 bird species were recorded as detailed on the Bird List (Appendix 1).

### Other Fauna Species Observed

Other fauna sighted included four unidentified tree frogs (*Litoria* sp.) (Figure 8), and three live and two dead (road-kill) Tiger Snake (*Notechis scutatus*).

A significant number of grasshoppers believed to be the Wingless Grasshopper (*Phaulacridium vittatum*) were also observed along the southern perimeter track by the campsite.

**Table 1.** Summary of mammals recorded at the Doug Fenwick Reserve (11-15 Mar 2016)

List of Mammals Recorded During the Survey		Method Used to find species				
Species	Code	Cage Trap	Remote Camera	Spotlight	Incidental Sighting	Signs
Bush Rat <i>Rattus fuscipes</i>	Z1395	T	R			
House Mouse <i>Mus musculus</i>	Y1412		R			
Short-beaked Echidna <i>Tachyglottus aculeatus</i>	W1003				S	
Koala <i>Phascolarctos cinereus</i>	E1162			S	S	
Common Brushtail Possum <i>Trichosurus vulpecula</i>	K1113			S		
Common Ringtail Possum <i>Psuedocheirus peregrinus</i>	C1129			S		
Eastern Grey Kangaroo <i>Macropus giganteus</i>	S1265				S	Scats & Skeletal
Black Wallaby <i>Wallabia bicolor</i>	E1242		R		S	Scats
Bats (unidentified)				S		
Macropod (unidentified)				H		
Sheep <i>Ovis aries</i>	U1522					Skull Skull

S – Seen

H – Heard

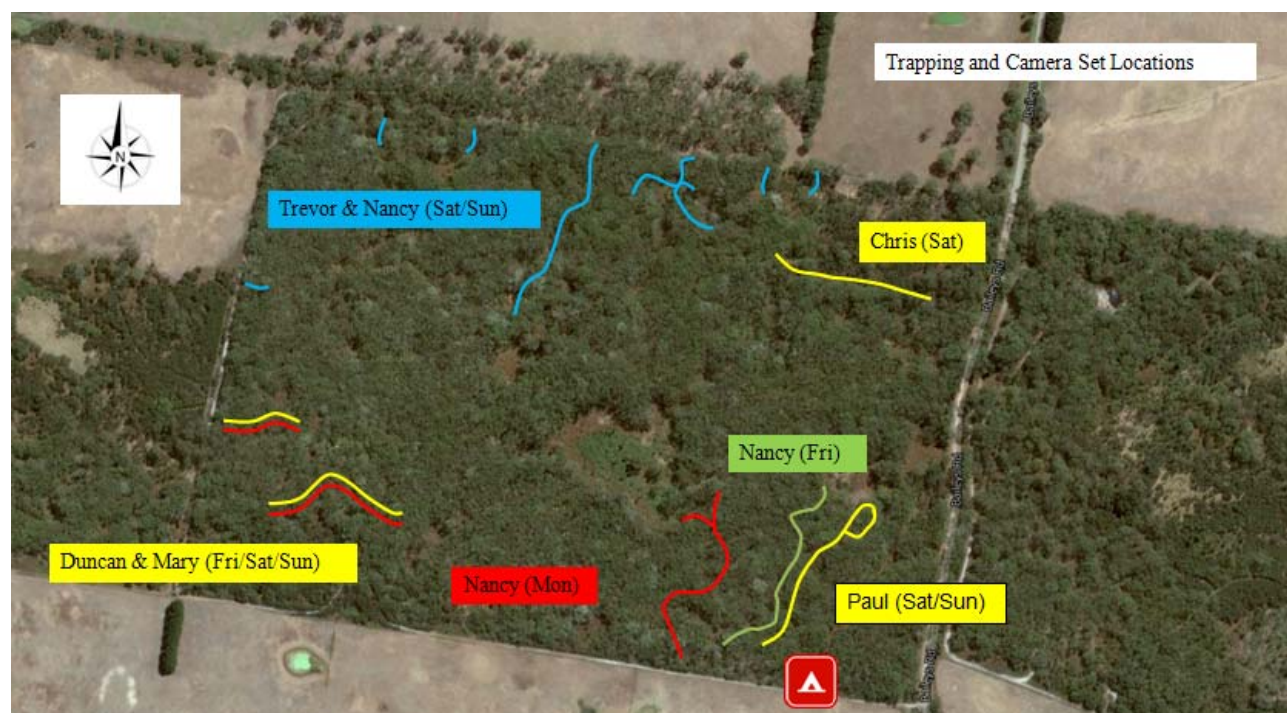
R – Recorded digitally

T – Trapped





**Figure 9.** Location map of Doug Fenwick Reserve, Baileys Rd, Nirranda, Vic, 3268.



**Figure 10.** Doug Fenwick Reserve trapping and remote camera location sites.



**Figure 11.** Photos of the southern and western tracks (Credits: Chris Wilson).





**Figure 12.** Doug Fenwick Reserve spotlighting routes.



**Figure 13.** Vegetation in the south-eastern section of the Doug Fenwick Reserve (Credits: Chris Wilson).

## Acknowledgements

Thanks to the Doug Fenwick Reserve Management Committee for allowing the MSGV to conduct the survey. Special thanks go to Lynda Avery and Denise Murray for their most helpful support and advice, and Nancy Van Nieuwenhove for guidance with the manuscript.

Mammals were handled under permits issued by the Department of Environment, Lands, Water and Planning (DELWP) - Flora and Fauna permit: 10006206, WSIEAC Approval 32.14.

## References

- Mammal Survey Group of Victoria Inc. (MSGV).** 1982. Survey Camp Report for the Doug Fenwick Reserve (Apr 1982), (unpublished).
- Department of Sustainability and Environment (DSE).** 2003. Flora and Fauna Guarantee Action Statement Number 49. Available at [http://www.depi.vic.gov.au/\\_\\_data/assets/pdf\\_file/0013/251230/Rufous\\_Bristlebird\\_Dasyornis\\_broadbenti.pdf](http://www.depi.vic.gov.au/__data/assets/pdf_file/0013/251230/Rufous_Bristlebird_Dasyornis_broadbenti.pdf) (accessed on 25 May 2016).





# Mammal Survey Group of Victoria Inc. Doug Fenwick Reserve, Nirranda

Date: 11-15 Mar 2016

## Appendix 1 - Bird List

S/H/F-&gt; (Seen/Heard/ Footage): 44 species

Name	Code	S/H	Name	Code	S/H	Name	Code	S/H	Name	Code	S/H
Albatross, Black Browed	A088		Falcon, Grey	Q236		Magpie, Australian	S705	S	Sandpiper, Curlew	K161	
Albatross, Shy	Z091		Falcon, Peregrine	S237		Magpie-Lark, Australian	W415	S	Sandpiper, Marsh	W159	
Albatross, Wandering	U086		Falcon, Australian Hobby	Z235		Maillard	Y948		Sandpiper, Pectoral	U978	
Albatross, Yellow-nosed	C089		Fantail, Grey	C361	S	Malleefowl	Z007		Sandpiper, Sharp-tailed	Z163	
Apostlebird	Z675		Fantail, Rufous	E362		Martin, Fairy	A360		Sandpiper, Terek	Y160	
Avocet, Red-necked	Q148		Finch, Zebra	C653		Martin, Tree	Z359		Sandpiper, Wood	M154	
Babler, Chestnut-crowned	M446		Firetail, Beautiful	U650		Miner, Bell	S633		Scrub-Robin, Southern	C441	
Babler, Grey-crowned	G443		Firetail, Diamond	U652	S	Miner, Black eared	Z967		Scrub-wren, Large billed	E494	
Babler, White-browed	K445		Firetail, Red browed	E662	S	Miner, Noisy	U634		Scrub-wren, White browed	Y488	
Bee-eater, Rainbow	C329		Flycatcher, Leaden	K365		Miner, Yellow throated	W635		Sea-Eagle, White bellied	M226	
Bellbird, crested	G419		Flycatcher, Restless	S369		Mistletoebird	A564		Shag, black faced	E098	
Bittern, Australasian	K197		Flycatcher, Satin	M366		Monarch, Black faced	K373		Shearwater, Flesh-footed	Y072	
Bittern, Little	G195		Friarbird, Little	E646		Moorhen, Dusky	Y056		Shearwater, Fluttring	Q068	
Black cockatoo, Glossy	C265		Friarbird, Noisy	C645		Myna, Common	E998		Shearwater, Hutton's	K913	
Black cockatoo, Red-tailed	A264		Frogmouth, Tawny	K313	S/H	Native-hen, Black-tailed	G055		Shearwater, Short-tailed	G071	
Black cockatoo, Yellow tailed	G267		Galah	C273	S	Needletail, White throated	U334		Shearwater, Sooty	E070	
Black Bird, common	Z991	S	Gannet, Australian	Q104		Nightjar, Spotted	Z331		Shelduck, Australian	G207	S
Blue bonnet	S297		Gerygone, Brown	M454		Nightjar, White throated	M330		Shoveler, Australasian	A212	
Boobook, Southern	M242	S/H?	Gerygone, Western	Z463		Oriole, Olive-backed	G671		Shrike-thrust, Grey	A408	S
Bowerbird, Satin	W679		Gerygone, white throated	K453		Osprey	K241		Shrike-tit, Crested	A416	
Bristlebird, Eastern	Z519		Giant Petrel, Northern	C937		Owl, Barking	U246		Silverye	E574	
Bristlebird, Rufous*	C521	F*	Giant Petrel, Southern	C929		Owl, Barn	C249		Skua, Varied	C549	
Brolga	C177		Godwit, Bar tailed	K153		Owl, Masked	M250		Skua, Great	Y980	
Bronze cuckoo, Horsefiled's	U342		Godwit, black tailed	Y152		Owl, Powerful	A248		Skylark, Common	S993	
Bronze cuckoo, Shining	A344		Goldfinch, European	A996		Owl, Sooty	S253		Snipe, Latham's	A168	
Bronzewing, Brush	W035		Goose, Cape barren	M198					Snipe, Painted	M170	
Bronzewing, Common	U034		Goshawk, Brown	C221		Owlet-nightjar, Australian	S317		Songlark, Brown	Y508	
Budgerigar	E310		Goshawk, Grey(White)	A220	S?	Oystercatcher, Pied	U130		Songlark, Rufous	K509	
Bushlark, Singing	Y848		Grassbird, Little	E222		Oystercatcher, Sooty	W131		Sparrow, Eurasian tree	U994	
Bustard, Australian	A176		Grasswren, Striated	C513		Pardalote, Spotted	C565		Sparrow, House	W995	
Butcherbird, Grey	M702	S	Grebe, Australian	C061		Pardalote, Striated	Q976		Sparrowhawk, Collared	E222	
Butcherbird, Pied	Y700		Grebe, Great crested	A060		Pardalote, Yellow-rumped	E566		Spinebill, Eastern	G591	
Button-quail, Little	U018		Grebe, Hoary headed	E062		Parrot, Australian king	C281		Spoonbill, Royal	S181	
Button-quail, Painted	M014		Green Finch, European	C997		Parrot, Blue Bonnet	S297		Spoonbill, Yellow-billed	U182	
Button-quail, Red chested	W019		Greenshank	U158		Parrot, Blue winged	M306		Starling, Common	G999	
Calamanthus	Q500		Gull, Kelp	K981		Parrot, Elegant	Z307		Stilt, Banded	Z147	
Chat, Crimson	S449		Gull, Pacific	E126		Parrot, Ground	G311		Stilt, Black-winged	M146	
Chat, Orange	E450		Gull, Silver	C125		Parrot, Malle ringneck	M291		Stint, Long-toed	K965	
Chat, White fronted	Q448	S	Hardhead	G215		Parrot, Mulga	Q296		Stint, Red-necked	M162	
Chough, White winged	S693		Harrier, Marsh	Z219		Parrot, Orange bellied	K305		Storm-petrel, Grey-backed	Y064	
Cicada bird	K429		Harrier, Spotted	M218		Parrot, Red-rumped	Z295		Storm-petrel, White-faced	K065	
Clasticola, Golden headed	K525		Heron, Pacific	K189		Parrot, Regent	M278		Storm-petrel, Wilson's	G063	
Cockatoo	E274		Heron, Rufous night	A192		Parrot, Superb	K277		Swallow, Welcome	K357	
Cockatoo, Gang-Gang	Y268	S	Heron, Striated	C193		Parrot, Swift	S309		Swallow, white-backed	M358	
Cockatoo, Pink	U270		Heron, White faced	Y188	S	Parrot, Torquoise	E302		Swampphen, Purple	M058	
Cockatoo, Sulphur crested	K269		Hobby, Australian	Z235		Pelican, Australian	U106		Swan, Black	W203	S
Coot, Eurasian	Z059		Honeyeater, Black	S589		Penguin, Little	K005		Swift, Fork-tailed	W335	S?
Corella, Little	W271	S	Honeyeater, Black Chinned	A580		Petrel, Blue	K081		Tattler, Grey-tailed	Z155	
Corella, Long billed	A272		Honeyeater, Blue faced	S641		Petrel, Cape	Y080		Teal, Chestnut	U210	
Cormorant, Great	A096		Honeyeater, Brownheaded	G583		Petrel, Great-winged	Z075		Teal, Grey	W211	
Cormorant, Little black	C097		Honeyeater, Crescent	M630		Petrel, white headed	S077		tern, Arctic	A952	
Cormorant, Little pied	Y100		Honeyeater, Fuscous	K613		Phalarope, Red-necked	Q932		tern, Caspian	Q112	
Cormorant, Pied	G099		Honeyeater, Grey fronted	Z623		Pigeon, Crested	W043	S	tern, Common	C953	
Crake, Australian	K049		Honeyeater, Lewin's	K605		Pigeon, Feral	K957		tern, Crested	W115	
Crake, Baillon's	U050		Honeyeater, New holland	Z631		Pigeon, Wonga	A044		tern, Fairy	E118	
Crake, Spotless	W051		Honeyeater, Painted	U598		Pilotbird	E506		tern, Gull-billed	Z111	
Crow, Little	Z691		Honeyeater, Pied	E602		Pipit, Richard's	G647		tern, Little	C117	
Cuckoo, Black eared	S341		Honeyeater, Purple gaped	Y620		Plains-wanderer	Y020		tern, Whiskered	M110	
Cuckoo, Brush	G339		Honeyeater, Regent	G603		Plover, black-fronted	Y144		tern, White-fronted	U114	
Cuckoo, Fantailed	E338		Honeyeater, Scarlett	M586		Plover, Double-banded	A140		tern, White-winged	C109	
Cuckoo, Pallid	C337		Honeyeater, Singing	Q608		Plover, Grey	Y136		Thick-knee, Bush	U174	
Cuckoo Shrike, Black faced	A424		Honeyeater, Spiny cheeked	Q640		Plover, Hooded	M138		Thornbill, Brown	W475	S
Cuckoo Shrike, Ground	W423		Honeyeater, Striped	S585		Plover, Large sand	C141		Thornbill, Buff-rumped	A484	
Cuckoo Shrike, White bellied	C425		Honeyeater, Tawny crowned	K593		Plover, Lesser golden	K137		Thornbill, Chestnut-rumped	S481	
Curlew, Eastern	S149		Honeyeater, White eared	S617		Plover, Mongolian	Z139		Thornbill, Inland	A476	
Currawong, Grey	C697	S	Honeyeater, White fronted	M594	S	Plover, Oriental	E142		Thornbill, Slender-billed	U482	
Currawong, Pied	U694		Honeyeater, White naped	M578	S	Plover, Red-capped	G143		Thornbill, Striated	M470	
Darter	K101		Honeyeater, White Plumed	S625		Pratincole, Australian	S173		Thornbill, Yellow	Z471	
Diving Petrel, Common	S085		Honeyeater, Yellow faced	M614	S	Prion, Antarctic	Q084		Thornbill, Yellow-rumped	E486	S
Dollarbird	U318		Honeyeater, Yellow plumed	M622		Prion, Fairy	Z083		Thrush, Song	Q992	
Dotterel, Inland	K145		Honeyeater, Yellow tufted	W619		Prion, Lesser broad-billed	S941		Thrush, White's	Z447	
Dotterel, Redkneed	A132		Hylacola, Chestnut rumped	M498		Prion, Slender billed	U942		Treecreeper, Brown	W555	
Dove, Diamond	Z031		Hylacola, Shy	Z499		Quail, Brown	E010		Treecreeper, Red-browed	Q560	
Dove, Peaceful	M030		Ibis, Glossy	E178		Quail, King	Y012		Treecreeper, White-browed	S561	
Duck, Blue billed	Y216		Ibis, Sacred	G179	S	Quail, Stubble	S009		Treecreeper, White-throated	E558	S
Duck, Freckled	E214		Ibis, Straw necked	Q180		Quail-Thrush, Chestnut	K437		Triller, White-winged	U430	
Duck, Hardhead	G215		Jaeger, Arctic	Y128		Quail-Thrush, Spotted	Y436		Turnstone, Ruddy	K129	
Duck, Maned	U202		Jaeger, Pomarine	C945		Rail, Buff-banded	E046		Turtle-Dove, Spotted	C989	
Duck, Musk	K217		Jacky, Winter	S377		Rail, Lewin's	C045		Wagtail, Willie	Y364	
Duck, Pacific black	Y205		Kestrel, Australian	Y240		Raven, Australian	M930	S	Warbler, Clamorous-reed	Y524	
Duck, Plumed Whistling	C205		King Parrot, Australian	C281		Raven, Forest	Y868	S?	Warbler, Speckled	A504	
Duck, Pink eared	C213		Kingfisher, Azure	W319		Raven, Little	E954	S?	Wattlebird, Little	C637	
Eagle, Little	K225		Kingfisher, Redbacked	S325		Redthroat	K497		Wattlebird, Red	E638	
Eagle, Wedge tailed	Y224	S	Kingfisher, Sacred	U326	S	Ringneck, Mallee	G291		Weebill	S465	
Egret, Cattle	S977		Kite, Black	S229		Robin, Eastern Yellow	Q392	S	Whimbrel	E150	
Egret, Eastern reef	W191		Kite, Black shouldered	Y232	S	Robin, Flame	M382		Whipbird, Eastern	S421	
Egret, Great	G187		Kite, Square tailed	E230		Robin, Hooded	S385		Whistler, Gilbert's	Z403	
Egret, Intermediate	E186		Kite, Whistling	Q228		Robin, Pink	Z383		Whistler, Golden	E398	S
Egret, Little	C185		Knot, Great	S165		Robin, Red-capped	K381		Whistler, Olive	S405	
Emu	C001		Knot, Red	Q164		Robin, Rose	Q384		Whistler, Red-lored	M402	
Emu-wren, Rufous crowned	Q528		Kookaburra, Laughing	M322	S/H	Robin, Scarlett	Y380		Whistler, Rufous	K401	S
Emu-wren, Southern	M526		Lapwing, Banded	G135		Rosella, Crimson	E282	S	Whistling-duck, Plumed	C205	
Fairy-wren, Splendid	Y532		Lapwing, Masked	C133	S/H	Rosella, Eastern	Q288	S	Whiteface, Southern	U466	
Fairy-wren, Superb	S529	S/F	Lorikeet, Little	Q260		Rosella, Yellow	T284		Woodswallow, Black-faced	U546	
Fairy-wren, Variegated	Q536		Lorikeet, Musk	E258		Ruff	U934		Woodswallow, Dusky	W547	S
Fairy-wren, White winged	Z535		Lorikeet, Purple crowned	G259		Sanderling	U166		Woodswallow, Masked	Q544	
Falcon, black	U238		Lorikeet, Rainbow	U254		Sandpiper, Broad-billed	W167		Woodswallow, White-breasted	Z543	
Falcon, Brown	W239		Lyrebird, Superb	U350		Sandpiper, Common	S157		Woodswallow, White-browed	S545	

\* Significant sighting

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