

Supplementary Material

How much survey effort is required to assess bird assemblages in fire-prone eucalypt forests using acoustic recorders?

Michael J. M. Franklin^{A,C}, Richard E. Major^B and Ross A. Bradstock^A

^ACentre for Environmental Risk Management of Bushfires, Centre for Sustainable Ecosystem Solutions, University of Wollongong, Wollongong, NSW 2522, Australia.

^BAustralian Museum Research Institute, Australian Museum, 1 William Street, Sydney, NSW 2010, Australia.

^CCorresponding author. Email: mjmf080@uowmail.edu.au

Table S1. Incidence rates for species observed in the study

The incidence (proportion of 20-min samples in which the species was detected) of 47 diurnal species observed in the study based on 1) complete acoustic data (n = 450 samples), 2) the three-survey stopping rule (n = 91 samples), and 3) the optimal method (n = 100 samples)

Common Name	Scientific name	Complete data	3-survey rule	Optimal method
Eastern Spinebill	<i>Acanthorhynchus tenuirostris</i>	0.969	0.967	0.960
Pied Currawong	<i>Strepera graculina</i>	0.753	0.945	0.900
Brown Thornbill	<i>Acanthiza pusilla</i>	0.718	0.703	0.690
Crimson Rosella	<i>Platycercus elegans</i>	0.711	0.835	0.810
White-throated Treecreeper	<i>Cormobates leucophaea</i>	0.660	0.703	0.740
Sulphur-crested Cockatoo	<i>Cacatua galerita</i>	0.656	0.802	0.760
Grey Shrike-thrush	<i>Colluricincla harmonica</i>	0.627	0.758	0.710
Yellow-faced Honeyeater	<i>Lichenostomus chrysops</i>	0.613	0.648	0.630
New Holland Honeyeater	<i>Phylidonyris novaehollandiae</i>	0.391	0.473	0.410
White-eared Honeyeater	<i>Lichenostomus leucotis</i>	0.362	0.473	0.420
Australian King-Parrot	<i>Alisterus scapularis</i>	0.358	0.549	0.530
Superb Lyrebird	<i>Menura novaehollandiae</i>	0.342	0.418	0.440
Striated Thornbill	<i>Acanthiza lineata</i>	0.336	0.374	0.400
Australian Magpie	<i>Cracticus tibicen</i>	0.329	0.429	0.370
Golden Whistler	<i>Pachycephala pectoralis</i>	0.296	0.396	0.340
Yellow-tailed Black Cockatoo	<i>Calyptorhynchus funereus</i>	0.293	0.330	0.330
Red Wattlebird	<i>Anthochaera carunculata</i>	0.269	0.209	0.230
Grey Fantail	<i>Rhipidura albiscapa</i>	0.262	0.418	0.370
Eastern Whipbird	<i>Psophodes olivaceus</i>	0.247	0.319	0.350
Spotted Pardalote	<i>Pardalotus punctatus</i>	0.153	0.044	0.050
Pilotbird	<i>Pycnoptilus floccosus</i>	0.089	0.088	0.140
Silvereye	<i>Zosterops lateralis</i>	0.084	0.088	0.090
Laughing Kookaburra	<i>Dacelo novaeguineae</i>	0.065	0.088	0.100
Satin Bowerbird	<i>Ptilonorhynchus violaceus</i>	0.058	0.110	0.100
Crescent Honeyeater	<i>Phylidonyris pyrrhopterus</i>	0.056	0.033	0.030
Australian Raven	<i>Corvus coronoides</i>	0.049	0.033	0.030
Grey Butcherbird	<i>Cracticus torquatus</i>	0.049	0.143	0.140
Wonga Pigeon	<i>Leucosarcia melanoleuca</i>	0.040	0.077	0.080
Gang-Gang Cockatoo	<i>Callocephalon fimbriatum</i>	0.033	0.033	0.040
Mistletoebird	<i>Dicaeum hirundinaceum</i>	0.029	0	0
Lewin's Honeyeater	<i>Meliphaga lewinii</i>	0.024	0.044	0.040
Brown-headed Honeyeater	<i>Melithreptus brevirostris</i>	0.020	0.011	0.020
Brown Goshawk	<i>Accipiter fasciatus</i>	0.013	0.011	0.010
Weebill	<i>Smicrornis brevirostris</i>	0.011	0.022	0.020
Striated Pardalote	<i>Pardalotus striatus</i>	0.009	0	0
White-browed Scrubwren	<i>Sericornis frontalis</i>	0.009	0.022	0.010
Eastern Yellow Robin	<i>Eopsaltria australis</i>	0.007	0	0
Rufous Fantail	<i>Rhipidura rufifrons</i>	0.007	0.022	0.020
Varigated Fairy-wren	<i>Malurus lamberti</i>	0.007	0	0
Yellow-throated Scrubwren	<i>Sericornis citreogularis</i>	0.007	0.022	0.020
Brown Cuckoo-Dove	<i>Macropygia amboinensis</i>	0.004	0.022	0.020

Brown Gerygone	<i>Gerygone mouki</i>	0.004	0	0
Leaden Flycatcher	<i>Myiagra rubecula</i>	0.004	0	0
White-naped Honeyeater	<i>Melithreptus lunatus</i>	0.004	0	0
Yellow Thornbill	<i>Acanthiza nana</i>	0.004	0	0
Crested Shrike-tit	<i>Falcunculus frontatus</i>	0.002	0.011	0.010
Welcome Swallow	<i>Hirundo neoxena</i>	0.002	0	0
Total no. species:		47	38	38