

Supplementary material

Appendix 1

Table A1. Model selection tables from Generalised Additive Models (GAM) depicting the relationship between body size and year for 24 species of Australian passerine (for latin names see Table 1). Shown are the top models with $\Delta AIC < 2$. DIST = nearest direct line distance to the coastline.

Species	(Intercept)	Age	Altitude	DIST	Latitude	s(Year)	Sex	df	logLik	AICc	delta	weight
Blue-faced honeyeater												
62	136.215	+	NA	0.628	-0.420	+	+	14.290	-268.059	569.518	0.000	0.271
58	134.852	+	NA	NA	-0.530	+	+	13.167	-269.794	569.985	0.467	0.214
61	135.689	NA	NA	0.604	-0.430	+	+	13.265	-270.100	570.855	1.338	0.139
57	134.387	NA	NA	NA	-0.535	+	+	12.146	-271.675	571.082	1.564	0.124
Brown honeyeater												
44	59.844	+	-0.004	NA	-0.095	NA	+	6.000	-258.835	530.406	0.000	0.270
43	59.358	NA	-0.004	NA	-0.103	NA	+	5.000	-260.628	531.778	1.372	0.136
43	81.546	NA	0.004	NA	-0.283	NA	+	5.000	-165.712	342.377	0.000	0.163
59	82.647	NA	0.003	NA	-0.255	+	+	6.000	-164.691	342.736	0.359	0.136
47	84.351	NA	0.004	-0.206	-0.221	NA	+	6.000	-165.212	343.779	1.402	0.081
57	82.439	NA	NA	NA	-0.288	+	+	5.000	-166.417	343.787	1.410	0.080
61	86.349	NA	NA	-0.287	-0.196	+	+	6.000	-165.376	344.108	1.731	0.069
63	85.298	NA	0.003	-0.197	-0.197	+	+	7.000	-164.222	344.281	1.904	0.063
Dusky honeyeater												
58	59.406	+	NA	NA	-0.266	+	+	6.273	-130.737	275.783	0.000	0.277
57	59.712	NA	NA	NA	-0.235	+	+	5.000	-132.786	276.704	0.921	0.175
Eastern spinebill												
46	67.369	+	NA	1.196	0.215	NA	+	6.000	-318.012	648.646	0.000	0.366
48	68.473	+	-0.001	1.850	0.242	NA	+	7.000	-317.471	649.778	1.132	0.208

62	67.634	+	NA	1.181	0.223	+	+	7.000	-317.607	650.049	1.403	0.182
Grey-crowned babbler												
9	104.186	NA	NA	NA	-0.339	NA	NA	3.000	-85.759	178.268	0.000	0.151
1	114.903	NA	NA	NA	NA	NA	NA	2.000	-87.510	179.384	1.116	0.086
11	105.013	NA	-0.003	NA	-0.335	NA	NA	4.000	-85.346	179.982	1.714	0.064
Hooded robin												
37	94.613	NA	NA	-0.619	NA	NA	+	4.000	-81.204	171.837	0.000	0.101
38	94.609	+	NA	-0.526	NA	NA	+	5.000	-79.846	171.914	0.078	0.097
40	97.421	+	-0.007	-0.865	NA	NA	+	6.000	-78.696	172.623	0.786	0.068
42	78.248	+	NA	NA	-0.427	NA	+	5.000	-80.327	172.877	1.040	0.060
49	92.484	NA	NA	NA	NA	+	+	4.876	-80.558	172.980	1.144	0.057
41	75.137	NA	NA	NA	-0.509	NA	+	4.000	-81.824	173.076	1.239	0.054
50	92.812	+	NA	NA	NA	+	+	5.832	-79.209	173.127	1.291	0.053
39	96.773	NA	-0.005	-0.892	NA	NA	+	5.000	-80.568	173.358	1.522	0.047
53	94.602	NA	NA	-0.595	NA	+	+	5.521	-79.928	173.617	1.781	0.041
Jacky winter												
41	82.770	NA	NA	NA	-0.125	NA	+	4.000	-113.148	235.064	0.000	0.161
33	86.667	NA	NA	NA	NA	NA	+	3.000	-114.812	236.077	1.013	0.097
42	83.291	+	NA	NA	-0.113	NA	+	5.000	-112.773	236.722	1.658	0.070
45	82.466	NA	NA	0.101	-0.127	NA	+	5.000	-112.845	236.866	1.802	0.065
34	86.849	+	NA	NA	NA	NA	+	4.000	-114.086	236.942	1.877	0.063
Little friarbird												
57	118.214	NA	NA	NA	-0.369	+	+	9.965	-338.929	699.756	0.000	0.221
58	118.386	+	NA	NA	-0.375	+	+	11.363	-337.273	699.834	0.079	0.213
59	118.050	NA	-0.003	NA	-0.394	+	+	11.014	-338.075	700.584	0.828	0.146
60	118.227	+	-0.003	NA	-0.399	+	+	12.309	-336.644	700.919	1.164	0.124
62	118.898	+	NA	0.232	-0.333	+	+	12.141	-337.137	701.489	1.733	0.093
61	118.544	NA	NA	0.160	-0.340	+	+	10.827	-338.884	701.746	1.990	0.082
New Holland honeyeater												
48	55.362	+	0.003	-2.735	-0.485	NA	+	7.000	-290.728	596.475	0.000	0.393

46	57.934	+	NA	-1.808	-0.424	NA	+	6.000	-292.740	598.237	1.763	0.163
Rufous-throated honeyeater												
50	68.559	+	NA	NA	NA	+	+	5.751	-76.827	167.724	0.000	0.206
34	68.755	+	NA	NA	NA	NA	+	4.000	-79.875	168.999	1.276	0.109
Silver-crowned friarbird												
43	119.048	NA	0.008	NA	-0.712	NA	+	5.000	-167.520	346.132	0.000	0.149
42	116.583	+	NA	NA	-0.964	NA	+	5.000	-167.522	346.136	0.004	0.149
41	117.056	NA	NA	NA	-0.916	NA	+	4.000	-168.783	346.280	0.148	0.138
44	118.362	+	0.007	NA	-0.783	NA	+	6.000	-166.581	346.717	0.585	0.111
Singing honeyeater												
62	78.004	+	NA	0.132	-0.266	+	+	7.182	-453.847	922.731	0.000	0.352
58	78.630	+	NA	NA	-0.257	+	+	6.342	-454.879	922.974	0.243	0.312
64	78.099	+	-0.001	0.172	-0.264	+	+	8.131	-453.655	924.426	1.695	0.151
Speckled warbler												
33	61.159	NA	NA	NA	NA	NA	+	3.000	-75.543	157.859	0.000	0.179
34	61.317	+	NA	NA	NA	NA	+	4.000	-74.892	159.117	1.258	0.095
49	61.051	NA	NA	NA	NA	+	+	4.000	-74.958	159.249	1.390	0.089
Variegated fairy-wren												
45	44.366	NA	NA	0.126	-0.056	NA	+	5.000	-307.130	624.650	0.000	0.240
61	44.118	NA	NA	0.129	-0.064	+	+	6.000	-306.370	625.290	0.640	0.174
White-browed scrubwren												
37	54.122	NA	NA	1.761	NA	NA	+	4.000	-93.150	195.253	0.000	0.309
38	53.989	+	NA	2.024	NA	NA	+	5.000	-92.741	196.946	1.693	0.132
White-eared honeyeater												
43	60.830	NA	0.003	NA	-0.649	NA	+	5.000	-220.330	451.393	0.000	0.214
44	60.305	+	0.003	NA	-0.670	NA	+	6.000	-219.323	451.684	0.291	0.185
59	61.186	NA	0.003	NA	-0.638	+	+	6.699	-218.547	451.777	0.385	0.177
47	61.840	NA	0.003	-0.273	-0.626	NA	+	6.000	-219.828	452.692	1.300	0.112
60	60.889	+	0.003	NA	-0.653	+	+	7.556	-217.983	452.706	1.314	0.111
48	61.227	+	0.003	-0.242	-0.648	NA	+	7.000	-218.925	453.249	1.857	0.085

White-gaped honeyeater

34	92.636	+	NA	NA	NA	NA	+	4.000	-143.625	296.033	0.000	0.200
58	88.311	+	NA	NA	-0.292	+	+	6.237	-141.369	297.063	1.029	0.120
42	90.082	+	NA	NA	-0.171	NA	+	5.000	-142.997	297.195	1.161	0.112
38	92.354	+	NA	1.006	NA	NA	+	5.000	-143.210	297.620	1.586	0.091
50	92.673	+	NA	NA	NA	+	+	5.000	-143.236	297.672	1.638	0.088

White-plumed honeyeater

60	70.161	+	0.002	NA	-0.235	+	+	9.013	-398.144	815.457	0.000	0.334
58	70.947	+	NA	NA	-0.224	+	+	7.886	-399.766	816.186	0.730	0.232
64	71.388	+	0.002	-0.092	-0.206	+	+	10.158	-397.311	816.384	0.927	0.210
62	72.074	+	NA	-0.082	-0.197	+	+	9.017	-399.076	817.330	1.874	0.131

White-throated honeyeater

24	56.709	NA	0.004	-1.078	-0.618	NA	+	6.000	-170.233	353.649	0.000	0.339
32	56.748	NA	0.004	-0.976	-0.610	+	+	7.000	-169.862	355.323	1.674	0.147
21	56.459	NA	NA	NA	-0.636	NA	+	4.000	-173.504	355.557	1.908	0.131

Yellow-rumped thornbill

33	58.650	NA	NA	NA	NA	NA	+	3.000	-58.845	124.546	0.000	0.110
1	59.766	NA	NA	NA	NA	NA	NA	2.000	-60.362	125.139	0.592	0.082
9	66.024	NA	NA	NA	0.190	NA	NA	3.000	-59.394	125.645	1.099	0.064
34	58.650	+	NA	NA	NA	NA	+	4.000	-58.398	126.277	1.730	0.046
41	63.098	NA	NA	NA	0.129	NA	+	4.000	-58.406	126.294	1.748	0.046
10	68.520	+	NA	NA	0.262	NA	NA	4.000	-58.462	126.405	1.859	0.043

Yellow-throated miner

59	128.562	NA	-0.012	NA	0.214	+	+	6.787	-652.758	1319.599	0.000	0.510
60	128.765	+	-0.012	NA	0.218	+	+	7.781	-652.618	1321.458	1.858	0.201

Yellow-tinted honeyeater

49	70.107	NA	NA	NA	NA	+	+	4.000	-108.395	225.743	0.000	0.268
51	69.790	NA	0.002	NA	NA	+	+	5.000	-108.124	227.712	1.969	0.100
46	73.035	+	NA	-1.399	-0.350	NA	+	6.000	-201.205	415.530	0.000	0.563