

Appendix from A. B. Phillimore et al., “Ecology Predicts Large-Scale Patterns of Phylogenetic Diversification in Birds” (Am. Nat., vol. 168, no. 2, p. 220)

Table A1

Biological and ecological data collected for the bird families included in the phylogeny of Sibley and Ahlquist (1990)

Family	Species ^a	Geographic range size ^b	Female body mass (g) ^c	Clutch size ^c	Sexual dichromatism ^c	Habitat generalism ^c	Feeding generalism ^c	Dispersal ^c	Island dwelling ^b
Struthionidae	1	16.36985	100,000.0	12	1	1	2	0	.00
Rheidae	2	14.98278	23,015.0	4	1	1	2	0	.01
Casuariidae	4	13.69454	34,950.0	7.5	.25	1	3	0	.72
Apterygidae	3	10.55247	2,620.0	1.7	0	1	1	0	1.00
Tinamidae	47	13.69614	886.0	4	.4	2	3	0	.01
Cracidae	49	13.26548	1,409.0	2.4	.18	2	2	1	.02
Megapodiidae	19	10.93792	1,218.0	15.6	.21	1	2	0	.86
Phasianidae	177	13.67596	996.0	7.2	.59	2	3	0	.17
Numididae	6	14.49975	1,588.0	7.3	0	1	3	0	.01
Odontophoridae	31	12.87543	200.0	9.8	.53	1	3	0	.01
Anhimidae	3	14.59606	3,972.0	5.5	0	1	1	1	.00
Anseranatidae	1	14.73102	2,000.0	7.5	0	1	1	1	.03
Dendrocygnidae	9	15.45164	709.0	10.2	.11	1	2	1	.31
Anatidae	148	14.813	1,423.0	7.4	.68	1	2	2	.17
Turnicidae	17	13.54568	63.8	4	1	1	2	1	.28
Indicatoridae	17	14.48933	26.7	4	.33	1	1	0	.05
Picidae	215	14.00954	86.9	3.8	...	...	...	...	.12
Megalaimidae	26	13.56324	119.0	3.1	...	...	...	...	.51
Lybiidae	42	14.35268	30.0	2.8	.2	2	2	0	.00
Ramphastidae	55	13.48504	329.0	3.7	...	...	...	...	.00
Galbulidae	18	14.19315	24.2	3	...	...	...	...	.00
Bucconidae	33	14.1714	32.8	2.4	.96	2	3	2	.00
Bucerotidae	54	13.13912	856.0	2.7	.1	1	1	...	.40
Bucorvidae	2	15.32501	3,412.0	1.8	0	1	2	0	.00
Upupidae	2	16.76047	66.0	7	.5	1	1	2	.01
Phoeniculidae	5	14.54598	64.0	3.4	.57	1	1	0	.00
Rhinopomastidae	3	15.41495	...	...	...	...	...	...	.00
Trogonidae	39	13.61861	63.3	2.7	1	1	1	...	.23
Coraciidae	12	15.2127	149.0	3.5	0	3	1	2	.19
Leptosomidae	1	13.29228	...	4.5	1	1	1	0	1.00
Meropidae	26	15.02268	39.3	4.1	.25	2	1	2	.10
Momotidae	9	13.96495	...	3.4	...	...	...	...	.00
Todidae	5	10.49838	6.8	2.8	0	1	1	0	1.00
Alcedinidae	24	13.38561	44.0	6.7	.18	2	2	1	.57
Dacelonidae	61	11.87955	109.5	4.1	...	...	...	...	.72
Cerylidae	9	16.40724	128.2	4.6	...	...	...	...	.01
Coliidae	6	14.59309	52.3	2.8	0	1	1	...	.00

Table A1 (Continued)

Family	Species ^a	Geographic range size ^b	Female body mass (g) ^c	Clutch size ^c	Sexual dichromatism ^c	Habitat generalism ^c	Feeding generalism ^c	Dispersal ^c	Island dwelling ^b
Cuculidae	79	14.14235	91.7	3	.18	2	1	2	.48
Centropidae	30	12.57428	204.0	3.6	...	...	...	...	.62
Coccyzidae	18	12.91368	71.7	2.6	...	...	...	...	.40
Opisthocomidae	1	15.80479	810.0	3	0	1	1	0	.00
Crotophagidae	4	15.95802	110.0	4.3	0	1	1	0	.01
Neomorphidae	11	14.18482	44.0	4	...	...	...	...	.00
Psittacidae	357	12.48405	246.0	3.7	.47	2	2	1	.39
Apodidae	99	12.9984	40.5	2.6	.03	2	1	2	.39
Hemiprocnidae	4	14.47947	60.0	1	...	...	...	...	.69
Trochilidae	319	12.72001	4.3	2	.77	2	1	2	.05
Musophagidae	23	13.75608	424.0	2.3	...	...	...	...	.00
Tytonidae	17	12.354	351.0	3.5	.17	3	1	1	.59
Strigidae	161	13.50885	600.0	3.6	.31	2	2	2	.31
Aegothelidae	8	11.94586	46.0	3.5	.125	1	1	0	.88
Podargidae	3	14.27736	...	2	.66	1	2	0	.52
Batrachostomidae	11	13.46314	...	1.5	...	...	...	...	.76
Steatornithidae	1	14.5072	...	3	...	...	...	...	.00
Nyctibiidae	7	14.28577	355.0	1	...	...	...	...	.01
Eurostopodidae	7	13.65224	...	1	...	...	...	...	.59
Caprimulgidae	76	13.88998	60.2	1.8	.89	2	1	2	.14
Columbidae	309	12.14967	257.0	1.6	.59	2	2	2	.58
Eurypygidae	1	16.05531	200.0	2	0	1	2	0	.00
Otididae	25	14.58311	2,460.0	2.1	1	1	2	1	.00
Gruidae	15	14.8033	5,036.0	2	0	1	2	2	.01
Heliornithidae	4	15.86764	558.0	4.5	...	...	...	...	.01
Psophiidae	3	14.60567	1,160.0	3	0	1	1	0	.00
Cariamidae	2	14.74373	1,750.0	2	0	1	2	0	.00
Rhynchotidae	1	9.714488	500.0	1	0	1	1	0	1.00
Rallidae	142	13.29996	296.0	6.1	.17	3	3	2	.34
Pteroclididae	8	14.97448	240.0	2.8	.125	1	1	1	.06
Thinocoridae	2	14.08	135.0	4	...	...	...	...	.06
Pedionomidae	1	12.94124	75.0	3.6	1	1	1	0	.00
Scolopacidae	88	14.30431	164.0	3.8	.23	1	1	2	.16
Rostratulidae	2	16.06686	140.0	3	.5	1	1	1	.04
Jacanidae	8	15.14636	177.0	3.9	...	...	...	...	.21
Chionididae	2	9.642463	420.0	2.5	...	...	...	...	.71
Burhinidae	9	15.20901	625.0	1.9	0	1	1	1	.08
Charadriidae	89	14.49915	190.0	3.3	.52	2	1	2	.18
Glareolidae	18	15.04082	156.0	2.3	...	...	...	...	.06
Laridae	129	13.35318	482.0	2	0	1	3	2	.26
Accipitridae	240	14.73801	1,471.0	2.3	.15	2	2	2	.24
Sagittariidae	1	16.5877	3,605.0	2.5	0	1	2	0	.00
Falconidae	63	14.859	463.0	3.2	.18	2	2	2	.18
Podicipedidae	21	14.70455	431.0	4.4	.14	1	1	2	.12
Phaethontidae	3	11.88988	...	1	...	...	...	...	.52
Sulidae	9	10.87194	1,986.0	1.6	0	1	1	2	.39
Anhingidae	4	15.22983	1,334.0	4	.75	1	1	0	.03
Phalacrocoracidae	38	11.73603	1,477.0	3.4	0	1	2	1	.38
Ardeidae	65	15.48271	793.0	3.7	.15	2	3	2	.16
Scopidae	1	16.8411	...	5	...	...	...	...	.03

Table A1 (Continued)

Family	Species ^a	Geographic range size ^b	Female body mass (g) ^c	Clutch size ^c	Sexual dichromatism ^c	Habitat generalism ^c	Feeding generalism ^c	Dispersal ^c	Island dwelling ^b
Phoenicopteridae	5	14.77589	2,055.0	1	0	1	1	1	.01
Threskiornithidae	34	14.62622	1,230.0	3	0	2	3	2	.04
Pelecanidae	9	14.5231	6,165.0	2.3	0	1	1	2	.04
Ciconiidae	26	15.87631	2,516.0	2.8	0	1	2	2	.07
Fregatidae	5	9.112843	1,317.0	1	1	1	1	0	.82
Spheniscidae	17	10.68063	3,135.0	1.9	.06	1	2	1	.62
Gaviidae	5	16.20901	3,233.0	2	0	1	1	2	.07
Procellariidae	115	9.172747	2,813.0	1	0	1	2	2	.75
Acanthisittidae	4	11.34732	7.5	4	...	...	...	...	1.00
Pittidae	31	12.97398	62.8	4.7	...	...	...	...	.51
Eurylaimidae	14	13.90127	59.7	3.8	1	1	2	0	.46
Tyrannidae	537	13.69668	45.0	2.6	.38	2	3	2	.04
Thamnophilidae	188	13.69212	23.6	2	...	...	...	...	.00
Furnariidae	280	13.40907	34.6	2.1	0	2	1	2	.01
Formicariidae	56	12.50371	64.0	2	...	...	...	...	.00
Conopophagidae	8	13.83024	21.8	2	1	1	1	0	.00
Rhinocryptidae	28	12.70398	99.0	2.1	0	1	1	0	.01
Climacteridae	7	13.84347	27.5	2.5	1	1	1	0	.15
Menuridae	4	11.68283	950.0	1	.5	1	1	0	.03
Ptilonorhynchidae	20	11.96908	144.0	1.4	.64	2	2	1	.58
Maluridae	26	12.95866	10.5	2.8	.96	2	1	0	.24
Meliphagidae	182	11.83191	33.5	2	.18	1	2	2	.64
Pardalotidae	68	12.77504	12.0	4	.21	2	1	1	.42
Eopsaltriidae	46	12.51397	15.0	2.7	...	...	...	...	.65
Irenidae	10	13.575	29.0	2	...	...	...	...	.64
Orthonychidae	2	11.76448	95.3	1	1	1	1	0	.31
Pomatostomidae	5	14.18399	71.0	...	...	...	...	...	.20
Laniidae	30	14.64418	40.5	4.6	.67	2	2	2	.08
Vireonidae	51	13.05279	14.9	3.5	.05	2	1	2	.17
Corvidae	647	12.47943	137.0	3.4	.76	3	3	2	.52
Bombycillidae	8	13.48643	45.8	3.5	.125	1	1	2	.13
Cinclidae	5	15.03345	60.7	4.9	0	1	1	0	.02
Muscicapidae	449	13.51001	37.1	4.4	.66	1	2	2	.24
Sturnidae	148	12.46621	84.8	3.7	.29	2	3	2	.38
Sittidae	25	13.72531	19.0	6.1	.6	1	1	0	.14
Certhiidae	97	13.27384	13.8	4.6	0	1	1	0	.05
Paridae	65	14.28076	14.0	7.2	.51	1	2	1	.08
Aegithalidae	8	13.79204	7.0	6.5	.125	1	1	0	.13
Hirundinidae	89	14.38872	20.1	3.9	.23	1	1	2	.09
Regulidae	6	13.74122	5.8	9	...	...	...	...	.36
Pycnonotidae	137	13.50087	34.2	2.6	.04	2	2	1	.31
Cisticolidae	119	13.74749	10.4	4.4	.22	2	1	2	.05
Zosteropidae	96	9.244908	10.6	3.2	.05	2	2	1	.89
Sylviidae	552	13.25978	23.8	4.5	.08	2	2	2	.28
Alaudidae	91	14.00819	27.8	3.4	.16	1	2	1	.04
Nectariniidae	169	12.90255	9.0	2	...	...	...	...	.42
Melanocharitidae	10	12.42204	...	...	1	1	2	...	1.00
Paramythiidae	2	12.60994	52.0	1	...	...	...	...	1.00
Passeridae	386	13.73608	18.9	4.4	.51	3	3	2	.16
Fringillidae	993	13.27164	29.5	3.6	.55	1	3	2	.10

App. from A. B. Phillimore et al., “Ecology and the Diversification of Birds”

Note: Geographic range size reports the mean family value of the ln-transformed geographic range (measured in km²). Female body mass and clutch size represent the means of these values across a family. Sexual dichromatism is a measure of the proportion of the members of a family that are described as sexually dichromatic (see Owens et al. 1999). Habitat generalism (1 = uses only one type of habitat for breeding, 2 = uses only two types of habitat for breeding, 3 = uses three or more types of habitat for breeding), feeding generalism (1 = uses only one food type, 2 = uses only two types of food, 3 = uses three or more types of food), and dispersal (0 = sedentary, 1 = locally nomadic or partially migratory, 2 = migratory with respect to either range or altitude) scores reported are the modal values for each family. Island dwelling was calculated as the mean proportion of species' geographic ranges that are 50 km or more from continental landmasses.

^a Number of species in a family was obtained from Sibley and Monroe (1990).

^b Data derived from a global data set of geographic distributions of birds (see Orme et al. 2005).

^c Data derived from appendixes 1 and 2 of Bennett and Owens (2002).