

Table 4. Monophyly of and significance of paraphyly of groups present in Sibley and Ahlquist's (1) hypothesis of passerine relationships, including only genera sampled in common with the current study

Node	Description	Taxon	Rank	Monophyletic	Likelihood	Difference	P
1	Garrulax, Sylvia	Sylviidae	Family	No	53898.79	18.53	0.88
2	1, Zosterops			Yes			
3	2, Cisticola			Yes			
4	3, Pycnonotus			Yes			
5	4, Regulus			No	53971.97	91.70	0.04
6	5, Hirundo			No	53974.74	94.48	0.04
7	6, Aegithalos			No	53935.08	54.82	0.26
8	Parus, Remiz	Paridae	Family	Yes			
9	7, 8			No	53940.80	60.53	0.20
10	Poipitia, Troglodytes			Yes			
11	10, Certhia	Certhiidae	Family	No	53897.10	16.84	0.91
12	11, Sitta			Yes			
13	9, 12	Sylviodea	Superfamily	No	53942.98	62.72	0.19
14	Ploceus, Prunella			No	53901.96	21.70	0.83
15	14, Motacilla			No	53909.57	23.31	0.67
16	15, Passer	Passeridae	Family	No	53906.93	26.66	0.73
17	Cardinalis, Icterus			No	53956.03	75.77	0.10
18	17, Thraupis			No	53931.97	51.70	0.31
19	18, Parula			No	53902.36	22.09	0.80
20	19, Emberiza	Emberizinae	Subfamily	Yes			
21	20, Fringilla	Fringillidae	Family	Yes			
22	Dicaeum, Nectarinia	Nectariniinae	Subfamily	Yes			
23	22, Promerops	Nectariniidae	Family	No	53903.40	23.13	0.80
24	Oedistoma, Toxorhamphus	Toxorhamphini	Tribe	Yes			
25	24, Melanocharis	Melanocharitidae	Family	Yes			
26	25, Paramythia			No	53926.75	46.48	0.38
27	23, 26			No	54050.19	169.92	<0.01
28	21, 27			No	54185.99	305.73	<0.01
29	16, 28			No	54070.52	190.25	<0.01
30	29, Alauda	Passeroidea	Superfamily	No	54122.87	242.60	<0.01
31	13, 30			No	54074.18	193.92	<0.01
32	Bombycilla, Ptilogonyx	Bombycillidae	Family	Yes			
33	Catharus, Turdus	Turdinae	Subfamily	Yes			
34	33, Muscipapa	Muscicapidae	Family	Yes			
35	Mimus, Sturnus	Sturnidae	Family	Yes			
36	34, 35			No	53899.15	18.88	0.86
37	36, Cinclus			Yes			
38	32, 37	Muscicapodea	Superfamily	Yes			
39	31, 38	Passerida	Parvorder	No	54046.29	166.02	<0.01
40	Chaetops, Picathartes	Picathartidae	Family	Yes			
41	Alluroedus, Ptilonorhynchus	Ptilonorhynchidae	Family	Yes			
42	41, Menua			No	53936.31	56.05	0.26
43	Climacteris, Cormobates	Climacteridae	Family	Yes			
44	42, 43	Menuroidea	Superfamily	No	53910.74	30.48	0.65
45	Ephthianura, Meliphaga	Meliphagidae	Family	Yes			
46	45, Pardalotus			Yes			
47	46, Malurus	Meliphagoidea	Superfamily	Yes			
48	Microeca, Tregellasia	Petroicidae	Family	Yes			
49	Chloropsis, Irena	Irenidae	Family	Yes			
50	Lanius, Corvinella	Laniidae	Family	Yes			
51	Hylophilus, Vireo	Vireonidae	Family	Yes			
52	Corcorax, Struthidea	Corcoracinae	Subfamily	Yes			
53	Colluricincla, Pachycephala, Pitohui	Pachycephalini	Tribe	No	54009.62	129.35	0.01
54	53, Oreocia, Falco			No	53888.09	7.83	0.97
55	54, Daphoenositta	Pachycephalinae	Subfamily	No	53898.23	17.96	0.84
56	Dryoscopus, Telophorus	Malaconotini	Tribe	Yes			
57	Batis, Prionops	Vangini	Tribe	No	53880.26	5.86	0.98
58	56, 57	Malaconotinae	Subfamily	No	53882.14	1.88	0.98
59	58, Aegithina			Yes			
60	Grallina, Monarcha	Monarchini	Tribe	Yes			
61	60, Chaetorhynchus, Dicrurus			No	53925.55	45.29	0.40
62	61, Rhipidura	Dicrurinae	Subfamily	No	53908.79	28.52	0.69
63	59, 62			No	54014.84	134.58	0.01
64	Corvus, Cyanocitta	Corvini	Tribe	Yes			
65	Paradisaea, Ptilons			Yes			
66	65, Manucodia			Yes			
67	66, Melampitta	Paradisaeini	Tribe	No	53893.77	13.50	0.95
68	Coracina, Lalage			Yes			
69	68, Pericrocotus			Yes			
70	Oniulus, Sphecotheres			Yes			
71	69, 70	Oriolini	Tribe	No	53889.26	8.99	0.93
72	Cracticus, Gymnorhina			Yes			
73	72, Strepera			Yes			
74	73, Artamus	Artamini	Tribe	Yes			
75	71, 74			No	53953.17	72.91	0.13
76	67, 75			No	54044.63	164.37	<0.01
77	64, 76	Corvinae	Subfamily	No	54075.58	195.31	<0.01
78	63, 77			No	53995.93	115.66	0.01
79	78, Pachycephalinae			No	54013.71	133.45	<0.01
80	79, Corcoracinae			No	53964.92	84.66	0.06
81	80, Ptilorhoa (Cinclosomatinae)	Corvidae	Family	No	53972.14	91.88	0.03
82	81, Vireonidae			No	53968.31	88.05	0.05
83	82, Laniidae			No	53996.47	16.21	0.88
84	83, Pomatosomidae			No	53959.92	79.65	0.06
85	84, Orthonychidae			No	53952.53	72.27	0.12
86	85, Irenidae			No	54067.42	187.15	<0.01
87	86, Petroicidae	Corvoidea	Superfamily	No	54066.54	186.28	<0.01
88	47, 87			No	54100.17	219.91	<0.01
89	44, 88	Corvida	Parvorder	No	54179.99	299.73	<0.01
90	Corvida, Passerida	Passeri	Suborder	Yes			
91	Campylorhamphus, Furnarius	Furnariidae/Furnarioidea	Family/Parvorder	Yes			
92	Conopophaga, Scytalopus			No	53912.61	32.34	0.61
93	92, Formicarius	Formicarioidea	Superfamily	No	53917.36	37.10	0.52
94	91, 93	Furnariida	Parvorder	Yes			
95	94, Thamnophilus			Yes			
96	Pipra, Rupicola			No	53903.93	23.66	0.76
97	Schiffornis, Tityra	Tityrinae	Subfamily	Yes			
98	97, Tyrannus			No	53902.13	21.87	0.80
99	96, 98			No	53904.67	24.41	0.76
100	99, Mionectes	Tyrannidae/Tyrannida	Family/Parvorder	Yes			
101	93, 100	Tyrannides	Infraorder	Yes			
102	Psarisomus, Smithornis	Eurylaimidae	Family	Yes			
103	102, Pitta	Eurylaimides	Infraorder	Yes			
104	101, 103			Yes			
105	104, Acanthisitta	Tyranni	Suborder	No	53908.38	28.12	0.70

The columns *Node* and *Description* can be used to reconstruct Sibley and Ahlquist's (1) tree for the genera shared with the current study. Groups which represent named higher taxa (1, 2) are indicated, as is their status on our preferred hypothesis of relationships (Figs. 1 and 3). For groups appearing paraphyletic in our analyses, the negative log-likelihood of the best tree consistent with the group, its difference from the best fit, and the significance of the difference (as indicated by the test of Shimodaira and Hasegawa, see *Methods* and ref. 3) are given.

1. Sibley, C.G. & Ahlquist, J.E. (1990) *Phylogeny and Classification of Birds: A Study in Molecular Evolution* (Yale Univ. Press, New Haven, CT).
2. Sibley, C.G. & Monroe, B.L., Jr. (1990) *Distribution and Taxonomy of the Birds of the World* (Yale Univ. Press, New Haven, CT)
3. Shimodaira, H. & Hasegawa, M. (1999) *Mol. Biol. Evol.* 16, 1114-1116.