

Supplementary material

Appendix 1

Table A1. Overview of sample sizes and basic characteristics of the species in this study. *Co* denotes mainland and *Is*, island populations. Bold face designates those species that form the main data set. The remaining species are extinct and/or had small sample sizes.

Species	Habitat	Sample size	Status, Distribution
Basra Reed Warbler <i>A. griseldis</i>	reed	14	<i>Co</i> Middle East
Great Reed Warbler <i>A. arundinaceus</i>	reed	27	<i>Co</i> Eurasia
Oriental Reed Warbler <i>A. orientalis</i>	reed, tall grass, bushes	27	<i>Co</i> Far East
Clamorous Reed Warbler <i>A. stentoreus brunnescens</i>	reed, bushes, mangroves	18	<i>Co</i> Central Asia, India
<i>A. st. stentoreus</i>	reed, bushes, mangroves	7	<i>Co</i> Near East
Australian Reed Warbler <i>A. australis</i>	reed, bushes	12	<i>Co</i> Australia
Nightingale Reed Warbler <i>A. luscinius</i>	cane thickets, high scrub	3	<i>Is</i> Marianas, Guam
Saipan Reed Warbler <i>A. hiwae</i>	woodland, tall brush and grass	8	<i>Is</i> Marianas, Saipan
Carolinian Reed Warbler <i>A. syrinx</i>	thickets, bushes, tall grass, reed	21	<i>Is</i> Caroline Is., Pohnpei
Nauru Reed Warbler <i>A. rehsei</i>	scrub, bushes, palm trees	5	<i>Is</i> Nauru
Millerbird <i>A. f. familiaris</i>	short grass, short scrub	12	<i>Is</i> Hawaii, Laysan
Bokikokiko Kiritimati R W <i>A. aequinoctialis</i>	high scrub, trees	12	<i>Is</i> Line Is, Tabuaeran
Cook Reed Warbler <i>A. kerearako</i>	wooded and bushy areas, scrub	4	<i>Is</i> Cook Is., Mangaia,

				Mitiaro
Tahiti Reed Warbler <i>A. caffer</i>	thick forest, bamboo	14	<i>Is</i>	Society Is, Tahiti
Moorea Reed Warbler <i>A. longirostris</i>	forest, bamboo	2	<i>Is</i>	Society Is, Moorea
Garrett's Reed Warbler <i>A. musae</i>	forest, bamboo	2	<i>Is</i>	Society Is, Huahine
Rimatara Reed Warbler <i>A. rimitarae</i>	low bushy vegetation, reed, woodland	12	<i>Is</i>	Austral Is, Rimatara
Tuamotu Reed Warbler <i>A. a. atyphus</i>	scrub, woodland, small trees	18	<i>Is</i>	NW <i>Tuamotus</i>
N Marquesan Reed Warbler <i>A. percernis</i>	forest, brush, scrub	24	<i>Is</i>	Marquesas
S Marquesan Reed Warbler <i>A. mendanae</i>	forests, brush, scrub	37	<i>Is</i>	Marquesas
Pitcairn Reed Warbler <i>A. vaughani</i>	forest, scrub	11	<i>Is</i>	Pitcairn
Henderson Reed Warbler <i>A. taiti</i>	forest, trees	14	<i>Is</i>	Henderson
Greater Swamp Warbler <i>A. (Calamocichla) rufescens</i>	reed, papyrus	18	<i>Co</i>	Africa
Lesser Swamp Warbler <i>A. (C.) gracilirostris</i>	reed, tall grass, bushes	13	<i>Co</i>	Africa
Madagascan Swamp Warbler <i>A. (C.) newtoni</i>	reed, scrub	11	<i>Co</i>	Madagascar
Cape Verde Warbler <i>A. (C.) brevipennis</i>	brush, scrub, reed	12	<i>Is</i>	Cap Verde
Seychelles Warbler <i>A. (C.) sechellensis</i>	Scrub, woodland	6	<i>Is</i>	Seychelles
Rodrigues Warbler <i>A. (C.) rodericanus</i>	dense thickets, woodland	7	<i>Is</i>	Rodrigues

Table A2. Effect sizes (Hedge's g) with respect to scores on the first axis of the discriminant analyses of functional complexes.

(a) Hind limb	g
<i>Acrocephalus</i>	4.769
<i>Calamocichla</i>	9.535

(b) Flight apparatus	g
<i>Acrocephalus</i>	4.401
<i>Calamocichla</i>	0.050

(c) Feeding	g
<i>Acrocephalus</i>	1.939
<i>Calamocichla</i>	0.266