## **Supplementary material**

## Genotypic and morphological variation between Galaxiella nigrostriata (Galaxiidae) populations: implications for conservation

David M. Galeotti<sup>A</sup>, Mark A. Castalanelli<sup>B,C,E</sup>, David M. Groth<sup>C</sup>, Clint McCullough<sup>A,D</sup> and Mark Lund<sup>A</sup>

<sup>A</sup>Mine Water and Environment Research Centre (MiWER), School of Natural Sciences, Edith Cowan University, 270 Joondalup Drive, Joondalup, WA 6027, Australia.

<sup>B</sup>Department of Terrestrial Zoology, Western Australian Museum, Locked Bag 49, Welshpool DC, WA 6986, Australia.

<sup>C</sup>School of Biomedical Sciences, CHIRI Biosciences Research Precinct, Faculty of Health Sciences, Curtin University, GPO Box U1987, Perth, WA 6845, Australia.

<sup>D</sup>Golder Associates Pty Ltd, West Perth, WA 6005, Australia.

<sup>E</sup>Corresponding author. Email: mark.castalanelli@museum.wa.gov.au

Table S1. Details of the specimens that were used in this study, including population, latitude and longitude information, including the details of the specimens used as out groups

SwCP, Swan coastal plain

ID	Local Population	Population	Region	Latitude	Longitude	Accession	
						Cyt b	Control region
MB13	EPP173 Melaleuca Park	Melaleuca Park	SwCP	-31.7029	115.963	KJ401185	KJ401228
MB15	EPP173 Melaleuca Park	Melaleuca Park	SwCP	-31.7029	115.963	KJ401186	KJ401230
MB16	EPP173 Melaleuca Park	Melaleuca Park	SwCP	-31.7029	115.963	KJ401187	KJ401227
MB18	EPP173 Melaleuca Park	Melaleuca Park	SwCP	-31.7029	115.963	KJ401188	KJ401226
MB37	EPP173 Melaleuca Park	Melaleuca Park	SwCP	-31.7029	115.963	KJ401189	KJ401229
CW116	Gardner River Catchment	Gardner River	Southern Coast	-34.7645	116.156	KJ401173	KJ401289
CW117	Gardner River Catchment	Gardner River	Southern Coast	-34.7645	116.156	KJ401174	KJ401290
CW26	Gardner River Catchment	Gardner River	Southern Coast	-34.7651	116.1569	KJ401176	KJ401291
CW50	Gardner River Catchment	Gardner River	Southern Coast	-34.7645	116.156	KJ401175	KJ401284

ID	Local Population	Population	Region	Latitude	Longitude	Accession	
	<b>.</b>	1			8	Cyt b	Control region
CW51	Gardner River Catchment	Gardner River	Southern Coast	-34.7645	116.156	KJ401177	KJ401281
CW52	Gardner River Catchment	Gardner River	Southern Coast	-34.7645	116.156	KJ401178	KJ401288
CW54	Gardner River Catchment	Gardner River	Southern Coast	-34.7651	116.1569	KJ401179	KJ401282
CW55	Gardner River Catchment	Gardner River	Southern Coast	-34.7563	116.1502	KJ401180	KJ401283
CW7	Gardner River Catchment	Gardner River	Southern Coast	-34.7651	116.1569	KJ401181	KJ401285
CW8	Gardner River Catchment	Gardner River	Southern Coast	-34.7651	116.1569	KJ401182	KJ401286
CW9	Gardner River Catchment	Gardner River	Southern Coast	-34.7651	116.1569	KJ401183	KJ401287
1K133	KSS EPP1	Kemerton	SwCP	-33.1332	115.7963	KJ401125	KJ401297
1K134	KSS EPP1	Kemerton	SwCP	-33.1332	115.7963	KJ401126	KJ401263
1K136	KSS EPP1	Kemerton	SwCP	-33.1332	115.7963	KJ401127	KJ401298
1K24	KSS EPP1	Kemerton	SwCP	-33.1332	115.7963	KJ401128	KJ401264
1K25	KSS EPP1	Kemerton	SwCP	-33.1332	115.7963	KJ401129	KJ401265
1K78	KSS EPP1	Kemerton	SwCP	-33.1332	115.7963	KJ401130	KJ401255
1K80	KSS EPP1	Kemerton	SwCP	-33.1332	115.7963	KJ401131	KJ401249
1K81	KSS EPP1	Kemerton	SwCP	-33.1332	115.7963	KJ401133	KJ401248
1K82	KSS EPP1	Kemerton	SwCP	-33.1332	115.7963	KJ401132	KJ401266
5K102	KSS EPP5	Kemerton	SwCP	-33.1393	115.794	KJ401134	KJ401257
5K103	KSS EPP5	Kemerton	SwCP	-33.1393	115.794	KJ401135	KJ401267
5K104	KSS EPP5	Kemerton	SwCP	-33.1393	115.794	KJ401136	KJ401250
5K105	KSS EPP5	Kemerton	SwCP	-33.1393	115.794	KJ401137	KJ401247
5K106	KSS EPP5	Kemerton	SwCP	-33.1393	115.794	KJ401138	KJ401268
5K107	KSS EPP5	Kemerton	SwCP	-33.1393	115.794	KJ401139	KJ401269
5K108	KSS EPP5	Kemerton	SwCP	-33.1393	115.794	KJ401140	KJ401238
5K109	KSS EPP5	Kemerton	SwCP	-33.1393	115.794	KJ401141	KJ401270
5K110	KSS EPP5	Kemerton	SwCP	-33.1393	115.794	KJ401142	KJ401256
5K142	KSS EPP5	Kemerton	SwCP	-33.1393	115.794	KJ401143	KJ401240
5K20	KSS EPP5	Kemerton	SwCP	-33.1393	115.794	KJ401144	KJ401259
6K140	KSS EPP6	Kemerton	SwCP	-33.1312	115.799	KJ401145	KJ401299
6K141	KSS EPP6	Kemerton	SwCP	-33.1312	115.799	KJ401146	KJ401300
6K22	KSS EPP6	Kemerton	SwCP	-33.1312	115.799	KJ401147	KJ401244
6K56	KSS EPP6	Kemerton	SwCP	-33.1312	115.799	KJ401148	KJ401231
6K64	KSS EPP6	Kemerton	SwCP	-33.1312	115.799	KJ401149	KJ401280
6K65	KSS EPP6	Kemerton	SwCP	-33.1312	115.799	KJ401150	KJ401239
6K68	KSS EPP6	Kemerton	SwCP	-33.1312	115.799	KJ401151	KJ401271
6K71	KSS EPP6	Kemerton	SwCP	-33.1312	115.799	KJ401152	KJ401272
6K72	KSS EPP6	Kemerton	SwCP	-33.1312	115.799	KJ401153	KJ401251
6K73	KSS EPP6	Kemerton	SwCP	-33.1312	115.799	KJ401154	KJ401252

ID	Local Population	Population	Region	Latitude	Longitude	Accession	
	-	-	-			Cyt b	Control region
6K74	KSS EPP6	Kemerton	SwCP	-33.1312	115.799	KJ401155	KJ401273
9K27	KSS EPP9	Kemerton	SwCP	-33.1179	115.7925	KJ401156	KJ401243
9K61	KSS EPP9	Kemerton	SwCP	-33.1179	115.7925	KJ401157	
9K62	KSS EPP9	Kemerton	SwCP	-33.1179	115.7925	KJ401158	KJ401241
9K63	KSS EPP9	Kemerton	SwCP	-33.1179	115.7925	KJ401159	KJ401253
9K83	KSS EPP9	Kemerton	SwCP	-33.1179	115.7925	KJ401160	KJ401235
9K84	KSS EPP9	Kemerton	SwCP	-33.1179	115.7925	KJ401161	KJ401236
9K85	KSS EPP9	Kemerton	SwCP	-33.1179	115.7925	KJ401162	KJ401258
9K87	KSS EPP9	Kemerton	SwCP	-33.1179	115.7925	KJ401163	KJ401233
9K88	KSS EPP9	Kemerton	SwCP	-33.1179	115.7925	KJ401164	KJ401237
9K89	KSS EPP9	Kemerton	SwCP	-33.1179	115.7925	KJ401165	KJ401274
9K90	KSS EPP9	Kemerton	SwCP	-33.1179	115.7925	KJ401166	KJ401254
9K91	KSS EPP9	Kemerton	SwCP	-33.1179	115.7925	KJ401167	KJ401275
PN100	KSS Paperbark New	Kemerton	SwCP	-33.1246	115.797	KJ401190	KJ401276
PN28	KSS Paperbark New	Kemerton	SwCP	-33.1246	115.797	KJ401191	KJ401246
PN59	KSS Paperbark New	Kemerton	SwCP	-33.1246	115.797	KJ401192	KJ401242
PN97	KSS Paperbark New	Kemerton	SwCP	-33.1246	115.797	KJ401193	KJ401277
PN98	KSS Paperbark New	Kemerton	SwCP	-33.1246	115.797	KJ401194	KJ401278
PN99	KSS Paperbark New	Kemerton	SwCP	-33.1246	115.797	KJ401195	KJ401232
PS42	KSS Paperbark Shallow	Kemerton	SwCP	-33.123	115.7975	KJ401196	KJ401245
PS44	KSS Paperbark Shallow	Kemerton	SwCP	-33.123	115.7975	KJ401197	KJ401260
PS57	KSS Paperbark Shallow	Kemerton	SwCP	-33.123	115.7975	KJ401198	KJ401261
PS75	KSS Paperbark Shallow	Kemerton	SwCP	-33.123	115.7975	KJ401199	KJ401234
PS76	KSS Paperbark Shallow	Kemerton	SwCP	-33.123	115.7975	KJ401200	KJ401279
PS77	KSS Paperbark Shallow	Kemerton	SwCP	-33.123	115.7975	KJ401201	KJ401262
LCS126	Lake Chandala	Kemerton	SwCP	-31.4982	115.9561	KJ401184	
SR1	Scott River Catchment	Scott River	Southern Coast	-34.2841	115.2401	KJ401204	KJ401224
SR111	Scott River Catchment	Scott River	Southern Coast	-34.2845	115.2331	KJ401202	KJ401223
SR113	Scott River Catchment	Scott River	Southern Coast	-34.2845	115.2331	KJ401203	KJ401219
SR2	Scott River Catchment	Scott River	Southern Coast	-34.2841	115.2401	KJ401205	KJ401216
SR3	Scott River Catchment	Scott River	Southern Coast	-34.2841	115.2401	KJ401212	KJ401217
SR33	Scott River Catchment	Scott River	Southern Coast	-34.2845	115.2331	KJ401206	KJ401214
SR34	Scott River Catchment	Scott River	Southern Coast	-34.289	115.2186	KJ401207	KJ401215
SR35	Scott River Catchment	Scott River	Southern Coast	-34.2845	115.2331	KJ401208	KJ401220
SR36	Scott River Catchment	Scott River	Southern Coast	-34.2845	115.2331	KJ401209	KJ401221
SR38	Scott River Catchment	Scott River	Southern Coast	-34.2845	115.2331	KJ401210	KJ401222
SR39	Scott River Catchment	Scott River	Southern Coast	-34.2835	115.268	KJ401211	KJ401225

ID	Local Population	Population	Region	Latitude	Longitude	Accession	
	· · · · · ·	· F · · · · · ·	8		8	Cyt b	Control region
SR40	Scott River Catchment	Scott River	Southern Coast	-34.2835	115.268	KJ401213	KJ401218
CP4	Shannon River Catchment	Shannon River	Southern Coast	-34.8404	116.2839	KJ401170	KJ401294
CP41	Shannon River Catchment	Shannon River	Southern Coast	-34.8404	116.2839	KJ401168	KJ401293
CP45	Shannon River Catchment	Shannon River	Southern Coast	-34.8404	116.2839	KJ401169	KJ401292
CP5	Shannon River Catchment	Shannon River	Southern Coast	-34.8404	116.2839	KJ401171	KJ401295
CP6	Shannon River Catchment	Shannon River	Southern Coast	-34.8404	116.2839	KJ401172	KJ401296
	alaxias bullocki					JQ697797	
	alaxias gothei					JN232601	
Galaxias	_					AF112319	
Galaxias	s divergens					JN232620	
Galaxias	s fasciatus					AF112318	
Galaxias	s gollumoides					JN232614	
Galaxias	s maculatus					AF007025	
Galaxias paucispondylus						JN232626	
Galaxias pullus						EF054195	
Galaxiella munda						JQ697787	
Galaxiel	Galaxiella pusilla					JQ697775	
Lepidog	Lepidogalaxias salamandroides					JN232586	
Lovettia	Lovettia sealii					JN232593	
Neochan	Neochanna apoda					DQ149820	
Neochan	Neochanna burrowsius					EU309259	
Neochanna cleaveri					AF022096		
Neochan	Neochanna diversus					AF022097	
Neochan	Neochanna heleios				DQ149819		
Paragalaxias dissimilis				JN232607			
Paragalaxias eleotroides				JN232608			
Paragalaxias julianus 1				JN232606			
Paragalaxias julianus 2				AF112309			
Paragalaxias mesotes 1				JN232605			
Paragalaxias mesotes 2					AF112308		
Retropinna tasmanica						JN232589	