Table S1. Summary of the historical taxonomy of the family Motacillidae (excluding the wagtails, genus *Motacilla*). Only major taxonomic works and articles proposing major taxonomic revisions have been included. By necessity this does not represent an exhaustive list of synonyms for each taxon, and for further taxonomic synonyms the reader is especially directed to Mayr & Greenway (1960) and Sharpe (1885). Dashes indicate taxa that were not dealt with or referred to by the study in question, while blank spaces indicate taxa that were only described after the publication of a particular reference work.

Taxonomy (This study)	**Van Els & Norambuena (2018)**	**Craig (2015)**	**Alström *et al*. (2015)**	**Davies & Peacock (2014)**	**Hockey *et al*. (2005)**
Anthus cervinus	*Anthus cervinus*	-	*Anthus cervinus*	-	*Anthus cervinus*
Anthus gustavi	*Anthus gustavi*	-	*Anthus gustavi*	-	-
Anthus gutturalis	-	-	*Anthus gutturalis*	-	-
Anthus hodgsoni	*Anthus hodgsoni*	-	*Anthus hodgsoni*	-	-
Anthus nilghiriensis	-	-	*Anthus nilghiriensis*	-	-
Anthus petrosus	-	-	*Anthus spinoletta*	-	-
Anthus pratensis	-	-	*Anthus pratensis*	-	-
Anthus roseatus	-	-	*Anthus roseatus*	-	-
Anthus rubescens	*Anthus rubescens*	-	*Anthus rubescens*	-	-
Anthus ruficollis	-	-	*Anthus ruficollis*	-	-
Anthus spinoletta	*Anthus spinoletta*	-	*Anthus spinoletta*	-	-
Anthus sylvanus	-	*Anthus sylvanus*	*Anthus sylvanus*	-	-
Anthus trivialis	*Anthus trivialis*	-	*Anthus trivialis*	-	-
Caffranthus brachyurus	-	-	*Anthus brachyurus*	-	*Anthus brachyurus*

Taxonomy (This study)	Van Els & Norambuena (2018)	Craig (2015)	Alström *et al*. (2015)	Davies & Peacock (2014)	Hockey *et al*. (2005)
Caffranthus caffer	-	-	-	-	*Anthus caffer*
Caffranthus sokokensis	-	-	-	-	-
Corydalla australis	-	-	-	-	-
Corydalla berthelotii	-	-	-	-	-
Corydalla campestris	-	*Anthus campestris*	*Anthus campestris*	-	-
Corydalla cinnamomeus	-	*Anthus cinnamomeus*	*Anthus cinnamomeus*	-	*Anthus cinnamomeus*
Corydalla cinnamomeus	-	-	-	*Anthus cinnamomeus*	*Anthus pseudosimilis*
Corydalla cinnamomeus	-	-	-	-	-
Corydalla cinnamomeus	-	-	-	*Anthus latistriatus*	-
Corydalla editus	-	*Anthus editus*	-	*Anthus hoeschi*	*Anthus hoeschi*
Corydalla godlewskii	-	-	-	-	-
Corydalla leucophrys	-	-	-	*Anthus leucophrys*	*Anthus leucophrys*
Corydalla melindae	-	-	-	*Anthus melindae*	-
Corydalla nicholsoni	-	-	-	*Anthus similis*	*Anthus similis*
Corydalla novaeseelandiae	-	-	-	*Anthus novaeseelandiae*	*Anthus novaeseelandiae*
Corydalla nyassae	-	*Anthus nyassae*	*Anthus nyassae*	*Anthus nyassae*	*Anthus nyassae*
Corydalla pallidiventris	-	-	-	-	-
Corydalla richardi	-	*Anthus richardi*	-	-	*Anthus richardi*

Taxonomy (This study)	Van Els & Norambuena (2018)	Craig (2015)	Alström *et al*. (2015)	Davies & Peacock (2014)	Hockey *et al*. (2005)
Corydalla rufulus	-	-	*Anthus rufulus*	-	*Anthus rufulus*
Corydalla similis	-	-	-	*Anthus similis*	*Anthus similis*
Corydalla similis	-	-	-	-	-
Corydalla vaalensis	-	-	-	*Anthus vaalensis*	*Anthus vaalensis*
Corydalla vaalensis	-	-	-	*Anthus vaalensis*	*Anthus longicaudatus*
Cynaedium crenatus	-	*Anthus crenatus*	-	*Anthus crenatus*	*Anthus crenatus*
Cynaedium lineiventris	-	*Anthus lineaventris [sic]*	*Anthus lineiventris*	*Anthus lineiventris*	*Anthus lineiventris*
Dendronanthus indicus	-	-	*Dendronanthus indicus*	-	-
Macronyx ameliae	-	-	-	-	*Macronyx ameliae*
Macronyx aurantiigula	-	-	-	-	-
Macronyx capensis	-	-	-	-	*Macronyx capensis*
Macronyx chloris	-	-	-	-	*Anthus chloris*
Macronyx croceus	-	-	*Macronyx croceus*	-	*Macronyx croceus*
Macronyx flavicollis	-	-	-	-	-
Macronyx fuelleborni	-	-	-	-	-
Macronyx grimwoodi	-	-	-	-	-
Macronyx sharpei	-	-	-	-	-
Pedicorys correndera	*Anthus correndera*	-	-	-	-

Taxonomy (This study)	**Van Els & Norambuena (2018)**	**Craig (2015)**	**Alström *et al*. (2015)**	**Davies & Peacock (2014)**	**Hockey *et al*. (2005)**
Pedicorys bogotensis	*Anthus bogotensis*	-	-	-	-
Pedicorys brevirostris	*Anthus brevirostris*	-	-	-	-
Pedicorys chacoensis	*Anthus chacoensis*	-	-	-	-
Pedicorys correndera	*Anthus correndera*	-	*Anthus correndera*	-	-
Pedicorys furcatus	*Anthus furcatus*	-	-	-	-
Pedicorys hellmayri	*Anthus hellmayri*	-	-	-	-
Pedicorys lutescens	*Anthus lutescens*	-	-	-	-
Pedicorys nattereri	*Anthus nattereri*	-	-	-	-
Pedicorys peruvianus	*Anthus peruvianus*	-	-	-	-
Pedicorys spragueii	*Anthus spraguei [sic]*	-	*Anthus spragueii*	-	-
Tmetothylacus tenellus	-	-	*Tmetothylacus tenellus*	-	*Tmetothylacus tenellus*

Liversidge & Voelker (2002)	Voelker (1999)	Harrison *et al.* 1997	Liversidge 1996	Clancey (1990)	Cooper (1985)
-	*Anthus cervinus*	*Anthus cervinus*	*Anthus cervinus*	*Anthus cervinus*	-
-	*Anthus gustavi*	-	-	-	-
-	-	-	-	-	-
Anthus hodgsoni	*Anthus hodgsoni*	-	-	-	-
Anthus nilghiriensis	-	-	-	-	-
-	*Anthus petrosus*	-	-	*Anthus petrosus*	-
-	*Anthus pratensis*	-	*Anthus pratensis*	-	-
-	*Anthus roseatus*	-	-	-	-
-	*Anthus rubescens*	-	-	*Anthus rubescens*	-
-	-	-	-	-	-
-	*Anthus spinoletta*	-	-	*Anthus spinoletta*	-
-	*Anthus sylvanus*	-	-	-	-
-	*Anthus trivialis*	*Anthus trivialis*	-	*Anthus trivialis*	-
-	*Anthus brachyurus*	*Anthus brachyurus*	-	*Anthus brachyurus*	-
-	*Anthus caffer*	*Anthus caffer*	*Anthus caffer*	*Anthus caffer*	-
-	*Anthus sokokensis*	*Anthus sokokensis*	-	*Anthus sokokensis*	-
-	*Anthus australis*	-	-	-	-
-	*Anthus berthelotii*	-	-	-	-
-	*Anthus campestris*	*Anthus campestris*	*Anthus campestris*	*Anthus campestris*	-

Liversidge & Voelker (2002)	Voelker (1999)	Harrison *et al.* 1997	Liversidge 1996	Clancey (1990)	Cooper (1985)
Anthus cinnamomeus	*Anthus cinnamomeus*	*Anthus cinnamomeus*	*Anthus cinnamomeus*	*Anthus cinnamomeus*	-
Anthus pseudosimilis					
-	-	-	-	*Anthus cinnamomeus*	-
-	-	*Anthus latistriatus*	-	*Anthus latistriatus*	-
Anthus hoeschi	*Anthus hoeschi*	*Anthus hoeschi*	*Anthus hoeschi*	*Anthus hoeschi*	-
-	*Anthus godlewskii*	-	-	*Anthus godlewskii*	-
Anthus leucophrys	*Anthus leucophrys*	*Anthus leucophrys*	*Anthus leucophrys*	*Anthus leucophrys*	*Anthus leucophrys*
Anthus melindae	*Anthus melindae*	*Anthus melindae*	-	*Anthus melindae*	-
Anthus similis	*Anthus similis*	*Anthus similis*	*Anthus similis*	*Anthus similis*	*Anthus similis*
-	*Anthus novaeseelandiae*	*Anthus novaeseelandiae*	-	*Anthus novaeseelandiae*	*Anthus novaeseelandiae*
Anthus nyassae	*Anthus nyassae*	*Anthus nyassae*	-	*Anthus nyassae*	-
-	*Anthus pallidiventris*	-	*Anthus pallidiventris*	*Anthus pallidiventris*	-
-	*Anthus richardi*	-	-	*Anthus richardi*	-
-	*Anthus rufulus*	-	-	*Anthus rufulus*	-
Anthus similis	*Anthus similis*	*Anthus similis*	*Anthus similis*	*Anthus similis*	*Anthus similis*
-	-	-	-	*Anthus latistriatus*	-
Anthus vaalensis	*Anthus vaalensis*	*Anthus vaalensis*	*Anthus vaalensis*	*Anthus vaalensis*	*Anthus vaalensis*
-	*Anthus longicaudatus*	-	*Anthus longicaudatus*		
-	*Anthus crenatus*	*Anthus crenatus*	-	*Anthus crenatus*	-

Liversidge & Voelker (2002)	Voelker (1999)	Harrison *et al.* 1997	Liversidge 1996	Clancey (1990)	Cooper (1985)
-	*Anthus lineiventris*	*Anthus lineiventris*	*Anthus lineiventris*	*Anthus lineiventris*	*Anthus lineiventris*
-	-	-	-	*Dendronanthus indicus*	*Dendronanthus indicus*
-	-	*Macronyx ameliae*	-	*Macronyx ameliae*	*Macronyx ameliae*
-	-	-	-	-	*Macronyx aurantiigula*
-	-	*Macronyx capensis*	-	-	*Macronyx capensis*
-	*Hemimacronyx chloris*	*Hemimacronyx chloris*	-	*Hemimacronyx chloris*	*Hemimacronyx chloris*
-	-	*Macronyx croceus*	-	*Macronyx croceus*	*Macronyx croceus*
-	-	-	-	-	*Macronyx flavicollis*
-	-	*Macronyx fuelleborni*	-	*Macronyx fuelleborni*	*Macronyx fuelleborni*
-	-	-	-	-	*Macronyx grimwoodi*
-	-	*Hemimacronyx sharpei*	-	*Hemimacronyx sharpei*	*Hemimacronyx sharpei*
-	*Anthus antarcticus*	-	-	-	-
-	*Anthus bogotensis*	-	-	-	-
-	*Anthus furcatus*	-	-	-	-
-	-	-	-	-	-
-	*Anthus correndera*	-	-	-	-
-	*Anthus furcatus*	-	-	-	-
-	*Anthus hellmayri*	-	-	-	-
Anthus lutescens	*Anthus lutescens*	-	-	*Anthus lutescens*	-

Liversidge & Voelker (2002)	Voelker (1999)	Harrison *et al.* 1997	Liversidge 1996	Clancey (1990)	Cooper (1985)
-	-	-	-	-	-
-	*Anthus lutescens*	-	-	-	-
-	*Anthus spragueii*	-	-	-	-
-	-	*Tmetothylacus tenellus*	-	*Tmetothylacus tenellus*	*Tmetothylacus tenellus*

Hall (1961)	Vaurie *et al*. 1960	Roberts (1922)	Sharpe (1885)	Type description	Author citation
Anthus cervinus	*Anthus cervinus*	-	*Anthus cervinus*	*Motacilla cervina*	*Pallas, 1811*
Anthus gustavi	*Anthus gustavi*	-	*Anthus gustavi*	*Anthus gustavi*	*Swinhoe, 1863*
Anthus gutturalis	*Anthus gutturalis*	-		*Anthus gutturalis*	*De Vis, 1894*
Anthus hodgsoni	*Anthus hodgsoni*	-	*Anthus maculatus*	*Anthus hodgsoni*	*Richmond, 1907*
Anthus nilghiriensis	*Anthus nilghiriensis*		*Anthus nilghiriensis*	*Anthus nilghiriensis*	*Sharpe, 1885*
Anthus spinoletta	*Anthus spinoletta*	-	*Anthus obscurus*	*Alauda petrosa*	*Montagu, 1798*
Anthus pratensis	*Anthus pratensis*	-	*Anthus pratensis*	*Alauda pratensis*	*Linnaeus, 1758*
Anthus roseatus	*Anthus roseatus*	-	*Anthus rosaceus*	*Anthus roseatus*	*Blyth, 1847*
Anthus spinoletta	*Anthus spinoletta*	-	-	*Alauda Rubescens [sic]*	*Tunstall, 1771*
-	-	-		*Madanga ruficollis*	*Rothschild & Hartert, 1923*
Anthus spinoletta	*Anthus spinoletta*	-	*Anthus spipoletta [sic]*	*Alauda Spinoletta [sic]*	*Linnaeus, 1758*
Anthus sylvanus	*Anthus sylvanus*	-	*Oreocorys sylvanus*	*Heterura sylvana*	*Blyth, 1845*
Anthus trivialis	*Anthus trivialis*	*Spipola trivialis*	*Anthus trivialis*	*Alauda trivialis*	*Linnaeus, 1758*
Anthus brachyurus	*Anthus brachyurus*	*Afranthus brachyurus*	*Anthus brachyurus*	*Anthus brachyurus*	*Sundevall, 1851*
Anthus caffer	*Anthus caffer*	*Caffranthus caffer*	*Anthus rufulus*	*Anthus caffer*	*Sundevall, 1851*
Anthus sokokensis	*Anthus sokokensis*	*Caffranthus sokokensis*		*Anthus sokokensis*	*van Someren, 1921*
-	*Anthus novaeseelandiae*	*Austranthus australis*	*Anthus australis*	*Anthus australis*	*Vieillot, 1818*
Anthus berthelotii	*Anthus berthelotii*	-	*Anthus bertheloti [sic]*	*Anthus Berthelotii [sic]*	*Bolle, 1862*

Hall (1961)	Vaurie *et al*. 1960	Roberts (1922)	Sharpe (1885)	Type description	Author citation
Anthus campestris	*Anthus campestris*	*Anthus campestris*	*Anthus campestris*	*Alauda campestris*	*Linnaeus, 1758*
Anthus novaeseelandiae	*Anthus novaeseelandiae*	*Anthus rufulus*	*Anthus rufulus*	*Anthus cinnamomeus*	*Rüppell, 1840*
					Liversidge & Voelker,
				Anthus pseudosimilis	*2002*
Anthus novaeseelandiae	*Anthus novaeseelandiae*	-		*Anthus rufulus camaroonensis*	*Shelley, 1900*
-	*Corydalla cinnamomeus*	-		*Anthus latistriatus*	*Jackson, 1899*
Anthus novaeseelandiae	*Anthus novaeseelandiae*	-		*Anthus richardi editus*	*Vincent, 1951*
Anthus godlewskii	*Anthus godlewskii*	-		*Agrodoma godlewskii*	*Taczanowski, 1876*
Anthus leucophrys	*Anthus leucophrys*	*Meganthus leucophrys*	*Anthus pyrrhonotus*	*Anthus leucophrys*	*Vieillot, 1818*
Anthus melindae	*Anthus melindae*	-		*Anthus melindae*	*Shelley, 1900*
Anthus similis	*Anthus similis*	*Anomalanthus nicholsoni*	*Anthus nicholsoni*	*Anthus nicholsoni*	*Sharpe, 1884*
			Anthus novae zealandiae		
Anthus novaeseelandiae	*Anthus novaeseelandiae*	-	*[sic]*	*Alauda novae Seelandiae*	*Gmelin, 1789*
Anthus similis	*Anthus similis*	-		*Anthus nicholsoni nyassae*	*Neumann, 1906*
Anthus pallidiventris	*Anthus pallidiventris*	-	*Anthus pyrrhonotus*	*Anthus pyrrhonotus pallidiventris*	*Sharpe, 1885*
Anthus novaeseelandiae	*Anthus novaeseelandiae*	-	*Anthus richardi*	*Anthus Richardi [sic]*	*Vieillot, 1818*
Anthus novaeseelandiae	*Anthus novaeseelandiae*	-	*Anthus rufulus*	*Anthus rufulus*	*Vieillot, 1818*
Anthus similis	*Anthus similis*	-	*Anthus sordidus*	*Anthus similis*	*Jerdon, 1840*
Anthus similis	*Anthus similis*	-		*Anthus bannermani*	*Bates, 1930*

Hall (1961)	Vaurie *et al*. 1960	Roberts (1922)	Sharpe (1885)	Type description	Author citation
Anthus vaalensis	*Anthus vaalensis*	*Meganthus vaalensis*		*Anthus vaalensis*	*Shelley, 1900*
				Anthus longicaudatus	*Liversidge, 1996*
Anthus crenatus	*Anthus crenatus*	*Petranthus crenatus*	*Anthus crenatus*	*Anthus crenatus*	*Finsch & Hartlaub, 1870*
Anthus lineiventris	*Anthus lineiventris*	*Cynaidium lineiventris [sic]*	*Anthus lineiventris*	*Anthus lineiventris*	*Sundevall, 1851*
-	*Dendronanthus indicus*	-	*Limonidromnus indicus*	*Motacilla indica*	*Gmelin, 1789*
-	*Macronyx ameliae*	-	*Macronyx ameliae*	*Macronyx ameliae*	*de Tarragon, 1845*
-	*Macronyx aurantiigula*	-		*Macronyx aurantiigula*	*Reichenow, 1891*
-	*Macronyx capensis*	-	*Macronyx capensis*	*Alauda capensis*	*Linnaeus, 1766*
Anthus chloris	*Anthus chloris*	*Hemimacronyx chloris*	*Anthus chloris*	*Anthus chloris*	*Lichtenstein, 1842*
-	*Macronyx croceus*	-	*Macronyx croceus*	*Alauda crocea*	*Vieillot, 1816*
-	*Macronyx flavicollis*	-	*Macronyx flavicollis*	*Macronyx flavicollis*	*Rüppell, 1840*
-	*Macronyx füllebornii*	-		*Macronyx füllebornii*	*Reichenow, 1900*
-	*Macronyx grimwoodi*			*Macronyx grimwoodi*	*Benson, 1955*
-	*Macronyx sharpei*	-		*Macronyx sharpei*	*Jackson, 1904*
Anthus antarcticus	*Anthus antarcticus*	-	*Anthus antarcticus*	*Anthus antarcticus*	*Cabanis, 1884*
Anthus bogotensis	*Anthus bogotensis*	-	*Anthus bogotensis*	*Anthus bogotensis*	*Sclater, 1855*
Anthus furcatus	*Anthus furcatus*	-	*Anthus furcatus*	*Anthus brevirostris*	*Taczanowski, 1874*
Anthus chacoensis	*Anthus chacoensis*			*Anthus chii chacoensis*	*Zimmer, 1952*

Hall (1961)	Vaurie *et al*. 1960	Roberts (1922)	Sharpe (1885)	Type description	Author citation
Anthus correndera	*Anthus correndera*	-	*Anthus correndera*	*Anthus correndera*	*Vieillot, 1818*
Anthus furcatus	*Anthus furcatus*	-	*Anthus furcatus*	*Anthus furcatus*	*Lafresnaye & d'Orbigny, 1837*
Anthus hellmayri	*Anthus hellmayri*	-		*Anthus hellmayri*	*Hartert, 1909*
Anthus lutescens	*Anthus lutescens*	-	*Anthus rufus*	*Anthus lutescens*	*Pucheran, 1855*
Anthus nattereri	*Anthus nattereri*	-	*Xanthocorys nattereri*	*Anthus nattereri*	*Sclater, 1878*
Anthus lutescens	*Anthus lutescens*	-	*Anthus peruvianus*	*Anthus peruvianus*	*Nicholson, 1878*
Anthus spragueii	*Anthus spragueii*	-	*Neocorys spraguii [sic]*	*Alauda spragueii*	*Audubon 1844*
Tmetothylacus tenellus	*Tmetothylacus tenellus*	*Tmetothylacus tenellus*	*Anthus tenellus*	*Macronix tenellus [sic]*	*Cabanis, 1878*

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Table S2. Summary of primers used to amplify museum and contemporary Motacillidae DNA in this study. All primers were specifically designed for this study, except for BirdR1 which we obtained from Hebert *et al.* (2004).

Primer pair	Oligonucleotide sequence	Gene region	Expected amplicon size (bp)	Contemporary or Museum DNA	Touchdown PCR annealing temperature (seconds) x No of cycles
AnthCyB-54F	5' CACATATGCCGAGACGTACA 3'	cyt *b*	826	Contemporary	56(20) x 2; 54(18) x 3;
AnthCyB-880R	5' TGAGTAGGCAGCCAACCAGT 3'				52(15) x 35
AnthCyB-246F	5' GTCCTACCATGAGGACAAATA 3'	cyt *b*	228	Museum	54(20) x 2; 52(18) x 3;
AnthCyB-474R	5' CACGAAACAGGATCAAACAACC 3'				50(15) x 35
AnthCyB-423F	5' GGCCTCACACTAGTTCACCT 3'	cyt *b*	265	Museum	58(20) x 2; 56(18) x 3;
AnthCyB-688R	5' ATACTTCCTATTCGCCTACGC 3'				54(15) x 35
Anthus_CO1-F1	5' CCTAAGCCTTCTCATCCGAGCAGA 3'	CO1	650	Contemporary	59(20) x 2; 57(18) x 3;
BirdR1*	5' ACGTGGGAGATAATTCCAAATCCTG 3'				55(15) x 35
CO1-DPIF	5' ACAGTCGAAGCAGGAGCAGG 3'	CO1	421	Museum	60(20) x 2; 58(18) x 3;
BirdR1*	5' ACGTGGGAGATAATTCCAAATCCTG 3'				56(15) x 35

Primer pair	Oligonucleotide sequence	Gene region	Expected amplicon size (bp)	Contemporary or Museum DNA	Touchdown PCR annealing temperature (seconds) x No of cycles
Anthus_CO1-F1	5’ GCTAGGTGTAGGGAGAAGATTG 3’	CO1	338	Contemporary	60(20) x 2; 58(18) x 3;
CO1-DPIR	5’ CCTAAGCCTTCTCATCCGAGCAGA 3’				56(15) x 35
CO1-DPIF	5’ ACAGTCGAAGCAGGAGCAGG 3’	CO1	301	Museum	58(20) x 2; 56(18) x 3;
CO1-DPRev	5’ GTGTTGAGGTTGCGGTCTGT 3’				54(15) x 35
Myo030L	5’ ATCTGGAGGTATGGAAAAGGGCA 3’	*Mb*	596	Contemporary	58(20) x 2; 56(18) x 3;
Myo-626R	5’ GCCAGACTAAGAAATAGGTTGCA 3’				54(15) x 35
Myo-88F	5’ GCTTTCATTTATTGATGACT 3’	*Mb*	538	Contemporary	49(20) x 2; 47(18) x 3;
Myo-626R	5’ GCCAGACTAAGAAATAGGTTGCA 3’				45(15) x 35
Myo-256F	5’ CTTGACAACAATAAACCAGCCCAT 3’	*Mb*	310	Museum	54(20) x 2; 52(18) x 3;
Myo-566R	5’ CAGCCTCTGGAGAGACAGT 3’				50(15) x 35

*Hebert *et al.* (2004).

Table S3. Sampling details for newly generated sequences, as well as sequences downloaded from GenBank and the International Barcode of Life (IBoL) databases that were used in this study. *Emberiza flaviventris* and *E. sahari* were used as outgroups. When whole mitochondrial genome sequences were available, these were preferentially used and in these instances the accession numbers are the same for both mitochondrial gene regions. GenBank accession numbers are provided for all sequences that were successfully amplified. Museum acronyms are: AMNH: American Museum of Natural History, New York, United States of America; DZUG: Department of Zoology, University of Gothenburg, Gothenburg, Sweden; EL: East London Museum, East London, South Africa; FMNH: Field Museum of Natural History, Chicago, United States of America; JF: Berkeley Natural History Museum, California, United States of America field number; MACN: Bernardino Rivadavia Natural Sciences Argentine Museum, Buenos Aires, Argentina; MBM: Marjorie Barrick Museum, University of Nevada, Las Vegas, United States of America; MMB: Malawi Museum, Blantyre, Malawi; NK: University of New Mexico, Albuquerque, United States of America field number; MNHN: Museum National d'Histoire Naturelle, Paris, France; MTD: Senchenberg Naturhistorische Sammlungen, Dresden, Germany; NHM: Natural History Museum, Tel Aviv University, Tel Aviv, Israel; NHMO: Natural History Museum, University of Oslo, Oslo, Norway; NMBV: National Museum, Bloemfontein, South Africa; NMK: National Museums of Kenya, Nairobi, Kenya; NMZB: Natural History Museum, Bulawayo, Zimbabwe; NRM: Swedish Museum of Natural History, Stockholm, Sweden; NSMT: National Museum of Nature and Science, Tokyo, Japan; ROM: Royal Ontario Museum, Toronto, Canada; TM: Ditsong National Museum of Natural History (formerly Transvaal Museum), Pretoria, South Africa; UMMZ: University of Michigan Museum of Zoology, Michigan, United States of America; USNM: National Museum of Natural History, Smithsonian Institution, Washington, DC, United States of America; UWBM: University of Washington Burke Museum, Washington, Unites States of America; YIO: Yamashina Institute for Ornithology, Japan; ZMUC: University of Copenhagen Zoological Museum, Copenhagen, Denmark. Other alpha-numeric sample numbers correspond to the South African Bird Ringing Unit (SAFRING) ring number of birds captured during this study and do not have a corresponding museum specimen. CO1 = Cytochrome Oxidase Subunit 1; cyt *b*

= Cytochrome *b*; *Mb* = Non-coding intron 2 of the Myoglobin gene; Sequences with a 'Voelker' prefix have not been submitted to any public database, and were received directly from G. Voelker (Texas A&M University); NS = No sequence number available.

Species	**Sample**	**Collecting locality**	**CO1**	**Length (nt)**	**cyt *b***	**Length (nt)**	***Mb***	**Length (nt)**	**Reference**
A. berthelotii		Macronesian archipelago			EU047720	798			Illera *et al.* (2007)
A. berthelotii		Macronesian archipelago			EU047721	798			Illera *et al.* (2007)
A. berthelotii		Macronesian archipelago			EU047722	798			Illera *et al.* (2007)
A. berthelotii		Macronesian archipelago			EU047723	798			Illera *et al.* (2007)
A. berthelotii		Unknown			U46769	798			Arctander *et al.* 1996
A. berthelotii		Macronesian archipelago	KT931982	563					Gonzalez-Quevedo *et al.* (2015)
A. berthelotii		Macronesian archipelago	KT931983	563					Gonzalez-Quevedo *et al.* (2015)
A. berthelotii		Macronesian archipelago	KT931984	563					Gonzalez-Quevedo *et al.* (2015)
A. berthelotii		Macronesian archipelago	KT931985	563					Gonzalez-Quevedo *et al.* (2015)

Species	**Sample**	**Collecting locality**	**CO1**	**Length (nt)**	**cyt *b***	**Length (nt)**	***Mb***	**Length (nt)**	**Reference**
A. brachyurus	UWBM 52901	KwaZulu-Natal, South Africa			AF526450	798			Voelker (2002)
A. brachyurus	NMZB 88248	Nottingham Estate, Beit Bridge	MF871977	242					*This study*
A. caffer	NMZB 47319	Mwekera, near Kitwe, Zambia			MF871892	257			*This study*
A. caffer	Voelker 479	Melmoth, KwaZulu-Natal Province, South Africa			NS	798			Voelker (1999)
A. campestris	UWBM 66449	Ovyurskiy Kozhuun, Kyzyl, Tuva, Russia	GQ481330	563					Kerr *et al.* (2009a)
A. campestris	UWBM 66596	Erzynskiy Kozhuun, Kyzyl, Tuva, Russia	GQ481333	563					Kerr *et al.* (2009a)
A. campestris		Unknown			JN614900	798			Zuccon & Ericson (2012)
A. campestris		Unknown					JN614754	598	Zuccon & Ericson (2012)

Species	**Sample**	**Collecting locality**	**CO1**	**Length (nt)**	**cyt *b***	**Length (nt)**	***Mb***	**Length (nt)**	**Reference**
A. campestris	USNM 645927	Joint Base Balad, Balad, Salah ad Din, Iraq	KP252167	563					Dove *et al. unpubl. data*
A. campestris		Unknown	KT931977	563					Gonzalez-Quevedo *et al.* (2015)
A. campestris		Unknown	KT931981	563					Gonzalez-Quevedo *et al.* (2015)
A. campestris		Skagen, Denmark			U46771	798			Arctander *et al.* 1996
A. campestris	NMZB 43742	[Agiasdeka], Crete	MF871978	242					*This study*
A. campestris	NMZB 43777	Galkayu, Western Somalia	MF871979	242					*This study*
A. cervinus	NHMO-BC216	Vesterelva, Finnmark, Norway	GU571250	563					Johnsen *et al*. (2010)
A. cervinus	UWBM 44314	Oktyabr` skiy, Kamchatka, Russia	GQ481335	563					Kerr *et al*. (2009a)
A. cervinus		Falsterbo, Sweden			U46776	798			Arctander *et al.* (1996)

Species	Sample	Collecting locality	CO1	Length (nt)	cyt *b*	Length (nt)	*Mb*	Length (nt)	Reference
A. chloris	AP48110	Langkloof 390, Wakkerstroom, Mpumalanga, South Africa	MF871900	563	MF871791	798	MF872007	598	*This study*
A. chloris	AP48117	Kranskop, Memel, Free State, South Africa	MF871901	563	MF871792	798	MF872008	598	*This study*
A. chloris	AP48129	Kranskop, Memel, Free State, South Africa	MF871902	563	MF871793	798	MF872009	598	*This study*
A. chloris	AP48132	Matatiele Nature Reserve, Eastern Cape, South Africa	MF871903	563	MF871794	798	MF872010	598	*This study*
A. chloris	AR32598	Verloren Vallei Nature Reserve, Mpumalanga, South Africa	MF871904	563	MF871795	798	MF872011	598	*This study*

Species	Sample	Collecting locality	CO1	Length (nt)	cyt *b*	Length (nt)	*Mb*	Length (nt)	Reference
A. chloris	AR58578	Verloren Vallei Nature Reserve, Mpumalanga, South Africa	MF871905	563	MF871796	798	MF872012	598	*This study*
A. chloris	AR58579	Verloren Vallei Nature Reserve, Mpumalanga, South Africa	MF871906	563	MF871797	798	MF872013	598	*This study*
A. chloris	BD76060	Langkloof 390, Wakkerstroom, Mpumalanga, South Africa	MF871907	563	MF871798	798	MF872014	598	*This study*
A. chloris	BD76061	Langkloof 390, Wakkerstroom, Mpumalanga, South Africa	MF871908	563	MF871799	798	MF872015	598	*This study*
A. chloris	BD76073	Langkloof 390, Wakkerstroom,	MF871909	563	MF871800	798	MF872016	598	*This study*

Species	Sample	Collecting locality	CO1	Length (nt)	cyt *b*	Length (nt)	*Mb*	Length (nt)	Reference
		Mpumalanga, South Africa							
A. chloris	BD76074	Langkloof 390, Wakkerstroom, Mpumalanga, South Africa	MF871910	563	MF871801	798	MF872017	598	*This study*
A. chloris	BD76075	Langkloof 390, Wakkerstroom, Mpumalanga, South Africa	MF871911	563	MF871802	798	MF872018	598	*This study*
A. chloris	BD76078	Langkloof 390, Wakkerstroom, Mpumalanga, South Africa	MF871912	563	MF871803	798	MF872019	598	*This study*
A. chloris	BD76082	Langkloof 390, Wakkerstroom,	MF871913	563	MF871804	798	MF872020	598	*This study*

Species	Sample	Collecting locality	CO1	Length (nt)	cyt *b*	Length (nt)	*Mb*	Length (nt)	Reference
		Mpumalanga, South Africa							
A. chloris	BD76083	Langkloof 390, Wakkerstroom, Mpumalanga, South Africa	MF871914	563	MF871805	798	MF872021	598	*This study*
A. chloris	FA02504	Langkloof 390, Wakkerstroom, Mpumalanga, South Africa	MF871971	563	MF871806	798	MF872023	598	*This study*
A. chloris	FA02505	Langkloof 390, Wakkerstroom, Mpumalanga, South Africa	MF871972	563	MF871807	798	MF872024	598	*This study*
A. chloris	FA02513	Langkloof 390, Wakkerstroom,	MF871915	563	MF871808	798	MF872025	598	*This study*

Species	Sample	Collecting locality	CO1	Length (nt)	cyt *b*	Length (nt)	*Mb*	Length (nt)	Reference
		Mpumalanga, South Africa							
A. chloris	FA02517	Langkloof 390, Wakkerstroom, Mpumalanga, South Africa	MF871916	563	MF871809	798	MF872026	598	*This study*
A. chloris	FA02528	Langkloof 390, Wakkerstroom, Mpumalanga, South Africa	MF871917	563	MF871810	798	MF872027	598	*This study*
A. chloris	FA02530	Langkloof 390, Wakkerstroom, Mpumalanga, South Africa	MF871918	563	MF871811	798	MF872028	598	*This study*
A. chloris	FA02534	Langkloof 390, Wakkerstroom,	MF871919	563	MF871812	798	MF872029	598	*This study*

Species	Sample	Collecting locality	CO1	Length (nt)	cyt *b*	Length (nt)	*Mb*	Length (nt)	Reference
		Mpumalanga, South Africa							
A. chloris	FA02535	Langkloof 390, Wakkerstroom, Mpumalanga, South Africa	MF871920	563	MF871813	798	MF872030	598	*This study*
A. chloris	FA02544	Langkloof 390, Wakkerstroom, Mpumalanga, South Africa	MF871973	563	MF871814	798	MF872031	598	*This study*
A. chloris	FA02545	Langkloof 390, Wakkerstroom, Mpumalanga, South Africa	MF871974	563	MF871815	798	MF872032	598	*This study*
A. chloris	FA02557	Langkloof 390, Wakkerstroom,	MF871921	563	MF871816	798	MF872033	598	*This study*

Species	Sample	Collecting locality	CO1	Length (nt)	cyt *b*	Length (nt)	*Mb*	Length (nt)	Reference
		Mpumalanga, South Africa							
A. chloris	FA02558	Langkloof 390, Wakkerstroom, Mpumalanga, South Africa	MF871922	563	MF871817	798	MF872034	598	*This study*
A. chloris	FB85333	Verloren Vallei Nature Reserve, Mpumalanga, South Africa	MF871923	563	MF871818	798	MF872035	598	*This study*
A. chloris	FH02422	Langkloof 390, Wakkerstroom, Mpumalanga, South Africa	MF871924	563	MF871819	798	MF872022	598	*This study*
A. chloris	GA77041	Verloren Vallei Nature Reserve, Mpumalanga, South Africa	MF871925	563	MF871820	798	MF872036	598	*This study*

Species	Sample	Collecting locality	CO1	Length (nt)	cyt *b*	Length (nt)	*Mb*	Length (nt)	Reference
A. chloris	GA77042	Verloren Vallei Nature Reserve, Mpumalanga, South Africa	MF871926	563	MF871821	798	MF872037	598	*This study*
A. chloris	GA77056	Verloren Vallei Nature Reserve, Mpumalanga, South Africa	MF871927	563	MF871822	798	MF872038	598	*This study*
A. chloris	GA77069	Verloren Vallei Nature Reserve, Mpumalanga, South Africa	MF871928	563	MF871823	798	MF872039	598	*This study*
A. chloris	GA77070	Verloren Vallei Nature Reserve, Mpumalanga, South Africa	MF871929	563	MF871824	798	MF872040	598	*This study*
A. chloris	GA77071	Verloren Vallei Nature Reserve, Mpumalanga, South Africa	MF871930	563	MF871825	798	MF872041	598	*This study*

Species	Sample	Collecting locality	CO1	Length (nt)	cyt *b*	Length (nt)	*Mb*	Length (nt)	Reference
A. chloris	GA77072	Verloren Vallei Nature Reserve, Mpumalanga, South Africa	MF871931	563	MF871826	798	MF872042	598	*This study*
A. chloris	GA77073	Verloren Vallei Nature Reserve, Mpumalanga, South Africa	MF871932	563	MF871827	798	MF872043	598	*This study*
A. chloris	GA77074	Verloren Vallei Nature Reserve, Mpumalanga, South Africa	MF871933	563	MF871828	798	MF872044	598	*This study*
A. chloris	GA77075	Verloren Vallei Nature Reserve, Mpumalanga, South Africa	MF871934	563	MF871829	798	MF872045	598	*This study*
A. chloris	GA77078	Verloren Vallei Nature Reserve, Mpumalanga, South Africa	MF871935	563	MF871830	798	MF872046	598	*This study*

Species	**Sample**	**Collecting locality**	**CO1**	**Length (nt)**	**cyt *b***	**Length (nt)**	***Mb***	**Length (nt)**	**Reference**
A. chloris	GA77081	Verloren Vallei Nature Reserve, Mpumalanga, South Africa	MF871936	563	MF871831	798	MF872047	598	*This study*
A. chloris	GA77082	Verloren Vallei Nature Reserve, Mpumalanga, South Africa	MF871937	563	MF871832	798	MF872048	598	*This study*
A. chloris	GA77083	Verloren Vallei Nature Reserve, Mpumalanga, South Africa	MF871938	563	MF871833	798	MF872049	598	*This study*
A. cinnamomeus	ZMUC 128582	Nyakadaka, Lake Kivu, Democratic Republic of the Congo					KP671536	598	Alström *et al*. (2015)
A. cinnamomeus		Masai Mara, Kenya			U46770	798			Arctander *et al.* (1996)
A. cinnamomeus	AP48115	Langkloof 390, Wakkerstroom,	MF871939	563	MF871835	798	MF871996	598	*This study*

Species	Sample	Collecting locality	CO1	Length (nt)	cyt *b*	Length (nt)	*Mb*	Length (nt)	Reference
		Mpumalanga, South Africa							
A. cinnamomeus	AP48125	Langkloof 390, Wakkerstroom, Mpumalanga, South Africa	MF871940	563	MF871836	798	MF871997	598	*This study*
A. cinnamomeus	FB09112	Langkloof 390, Wakkerstroom, Mpumalanga, South Africa	MF871941	563	MF871837	798	MF871998	598	*This study*
A. cinnamomeus	FB09113	Langkloof 390, Wakkerstroom, Mpumalanga, South Africa	MF871942	563	MF871838	798	MF871999	598	*This study*

Species	Sample	Collecting locality	CO1	Length (nt)	cyt *b*	Length (nt)	*Mb*	Length (nt)	Reference
A. cinnamomeus	FB53285	Verloren Vallei Nature Reserve, Mpumalanga, South Africa	MF871943	563	MF871840	798	MF872000	598	*This study*
A. cinnamomeus	FB85332	Langkloof 390, Wakkerstroom, Mpumalanga, South Africa	MF871944	563	MF871842	798		598	*This study*
A. cinnamomeus	FH02433	Langkloof 390, Wakkerstroom, Mpumalanga, South Africa	MF871945	563	MF871844	798	MF872001	598	*This study*
A. cinnamomeus	GA77057	Verloren Vallei Nature Reserve, Mpumalanga, South Africa	MF871946	563	MF871849	798	MF871995	598	*This study*
A. cinnamomeus	NMZB 32749	Chitunta Plains, Zambia			MF871895	229			*This study*

Species	Sample	Collecting locality	CO1	Length (nt)	cyt *b*	Length (nt)	*Mb*	Length (nt)	Reference
A. cinnamomeus	NMZB 68074	L.[agoa] Technicauda (hump.) [=Humpata District, Angola]	MF871980	242					*This study*
A. cinnamomeus	NMZB 73583	Sombani, Mlanje, Malawi	MF871981	242					*This study*
A. cinnamomeus	TM13686	Mlanje, Malawi			MF871888	400			*This study*
A. cinnamomeus	NMZB80169	The Corner, Zimbabwe	MF871982	242	MF871877	197			*This study*
A. cinnamomeus	TM37937	Wakkerstroom, Mpumalanga, South Africa			MF871889	393			*This study*
A. cinnamomeus	TM40658	Bisley, Pietermaritzburg, KwaZulu-Natal			MF871890	400			*This study*
A. cinnamomeus	TM61649	Lake Khuali, Mozambique			MF871891	400			*This study*
A. correndera	MACN-Or-ct 581	Rio Negro, Argentina	FJ027123	563					Kerr *et al.* (2009b)

Species	**Sample**	**Collecting locality**	**CO1**	**Length (nt)**	**cyt *b***	**Length (nt)**	***Mb***	**Length (nt)**	**Reference**
A. correndera	MACN-Or-ct 631	Rio Negro, Argentina	FJ027125	563					Kerr *et al.* (2009b)
A. correndera	MACN-Or-ct 580	Estancia Neneo Ruca, Pilcaniyeu, Rio Negro, Argentina	HM905967	563					Campagna *et al.* (2012)
A. correndera	MACN-Or-ct 584	Estancia Neneo Ruca, Pilcaniyeu, Rio Negro, Argentina	HM905970	563					Campagna *et al.* (2012)
A. correndera	AMNH 13588	Provincia Rio Negro, Argentina			KP671517	798	KP671537	598	Alström *et al*. (2015)
A. crenatus	FA76351	Tswalu Kalahari Reserve, NC, South Africa			MF925737	735	MF872061	528	*This study*
A. crenatus	FB86129	Tafelkop, Petrusburg, Free State, South Africa			MF871852	798	MF872062	520	*This study*

Species	Sample	Collecting locality	CO1	Length (nt)	cyt *b*	Length (nt)	*Mb*	Length (nt)	Reference
A. crenatus	JF 4161	Sandymount Park, Fauresmith, Free State, South Africa	MF871947	563	MF871853	798	MF872063	528	*This study*
A. crenatus	NK 174339	Zeekoegat, Rouxville District, Free State, South Africa			MF871854	798	MF872064	520	*This study*
A. crenatus	NK 174358	Zeekoegat, Rouxville District, Free State, South Africa			MF871855	798	MF872065	528	*This study*
A. crenatus	NMBV 5623	Bleskop, Fauresmith, Free State, South Africa			MF871878	424			*This study*
A. crenatus	NMBV 7310	Bothashoek, Amakulu, Petrusburg, Free State, South AFrica			MF871879	424			*This study*
A. crenatus	NMBV 7086	Biddulphsberg, Senekal, Free State, South Africa			MF871859	798	MF872069	520	*This study*

Species	Sample	Collecting locality	CO1	Length (nt)	cyt *b*	Length (nt)	*Mb*	Length (nt)	Reference
A. crenatus	NMBV 7185	Bleskop, Fauresmith, Free State, South Africa	MF871948	563	MF871857	798	MF872067	528	*This study*
A. crenatus	NMBV 7234	Vollewens, Dewetsdorp, Free State, South Africa			MF871856	798	MF872066	520	*This study*
A. crenatus	NMBV 7568	Inhoek, Rouxville, Free State, South Africa			MF871860	798	MF872070	520	*This study*
A. crenatus	NMBV 7636	Prynnsberg, Groblershoop, Northern Cape, South Africa			MF871858	798	MF872068	528	*This study*
A. editus	NMBV 04048	Phalang, Semongkong, Lesotho	MF871983	242	MF871896	224			*This study*
A. furcatus	USNM 630477	Soriano, Uruguay	JQ174047	563					Schindel *et al*. (2011)
A. godlewskii	UWBM 46331	Ulan-Ude, Buryatia, Russia	GQ481338	563					Kerr *et al.* (2009a)
A. godlewskii	UWBM 66704	Ovyurskiy Kozhuun, Kyzyl, Tuva, Russia	GQ481339	563					Kerr *et al.* (2009a)

Species	Sample	Collecting locality	CO1	Length (nt)	cyt *b*	Length (nt)	*Mb*	Length (nt)	Reference
A. godlewskii	UWBM 57998	Dzavhan, Mongolia	GQ481341	563					Kerr *et al.* (2009a)
A. gustavi	UWBM 75486	Spassk-Dal`niy, Spasskiy Rayon, Primorskiy Kray, Russia	GQ481343	563					Kerr *et al.* (2009a)
A. gustavi	UWBM 43951	Anadyr, Chukotskiy Avtonomnaya Okrug, Russia	GQ481344	563					Kerr *et al.* (2009a)
A. gustavi	UWBM 43958	Anadyr, Chukotskiy Avtonomnaya Okrug, Russia	GQ481345	563					Kerr *et al.* (2009a)
A. gustavi		Mt. Makiling Forest Reserve, Los Banos, Laguna, Philippines	KC354895	563					Luczon *et al.* (2013)
A. gustavi		Hong Kong			KP671519	197			Alström *et al*. (2015)

Species	Sample	Collecting locality	CO1	Length (nt)	cyt *b*	Length (nt)	*Mb*	Length (nt)	Reference
A. gutturalis	AMNH 340281	Near Puncak Trikora (Mt. Wilhelmina), western New Guinea			KP671520	197			Alström *et al*. (2015)
A. gutturalis	NRM 571423	Mount Wilhelm, Eastern New Guinea					KP671538	598	Alström *et al*. (2015)
A. hellmayri	MACN-Or-ct 834	Jujuy, Argentina	FJ027126	563					Kerr *et al.* (2009b)
A. hellmayri	MACN-Or-ct 1050	Jujuy, Argentina	FJ027128	563					Kerr *et al.* (2009b)
A. hodgsoni	NSMT-A15380	Ashoro, Japan	AB842559	563					Saitoh *et al.* (2015)
A. hodgsoni	YIO-64541	Shiojiri-shi, Nangano, Honshu, Japan	AB843356	563					Saitoh *et al.* (2015)
A. hodgsoni	UWBM 60056	Choibalsan, Dornod Aymag, Dornod, Mongolia	GQ481347	563					Kerr *et al.* (2009a)

Species	**Sample**	**Collecting locality**	**CO1**	**Length (nt)**	**cyt *b***	**Length (nt)**	***Mb***	**Length (nt)**	**Reference**
A. hodgsoni	UWBM 56521	Noyabr`sk, Yamalo-Nenetskiy Avtonomnyi Okrug, Tyumenskaya Oblast`, Russia	GQ481348	563					Kerr *et al.* (2009a)
A. hodgsoni	AMNH (JGG1026)	Unknown					KC007671	598	Barker *et al.* (2013)
A. hodgsoni		Unknown			KJ456193	798			Price *et al*. (2014)
A. hodgsoni		Huaining, Anqing, Anhui Province, China	KX189345	563	KX189345	798			Sun *et al*. (2016)
*A. leucophrys**	UWBM 52816	Eastern Cape Province, South Africa			AF526447	798			Voelker (2002)
A. leucophrys	GA77044	Verloren Vallei Nature Reserve, Mpumalanga, South Africa	MF871949	563	MF871861	798	MF872002	598	*This study*

Species	**Sample**	**Collecting locality**	**CO1**	**Length (nt)**	**cyt *b***	**Length (nt)**	***Mb***	**Length (nt)**	**Reference**
A. leucophrys	GA77047	Verloren Vallei Nature Reserve, Mpumalanga, South Africa	MF871950	563	MF871862	798	MF872003	598	*This study*
A. leucophrys	GA77048	Verloren Vallei Nature Reserve, Mpumalanga, South Africa	MF871951	563	MF871863	798	MF872004	598	*This study*
A. leucophrys	GA77050	Verloren Vallei Nature Reserve, Mpumalanga, South Africa	MF871952	563	MF871864	798	MF872005	598	*This study*
A. leucophrys	GA77051	Verloren Vallei Nature Reserve, Mpumalanga, South Africa	MF871953	563	MF871865	798	MF872006	598	*This study*
A. lineiventris	ZMUC 144474	Iringa, Tanzania					KP671539	598	Alström *et al*. (2015)
A. lineiventris	Voelker 487	Melmoth, KwaZulu-Natal, South Africa			NS	735			Voelker (1999)

Species	**Sample**	**Collecting locality**	**CO1**	**Length (nt)**	**cyt *b***	**Length (nt)**	***Mb***	**Length (nt)**	**Reference**
A. longicaudatus	NMBV 04440	Cypherfontein, Springfontein, Free State, South Africa	MF871984	242	MF871880	425			*This study*
A. lutescens	MACN-Or-ct 1686	Corrientes, Argentina	FJ027129	563					Kerr *et al.* (2009b)
A. lutescens	MACN-Or-ct 1474	Corrientes, Argentina	FJ027130	563					Kerr *et al.* (2009b)
A. melindae	Voelker 10821	Malindi, Kenya			NS	735			Voelker (1999)
A. nilghiriensis	AMNH 801362	Kadai Kanal, Palni hills, Tamil Nadu, India			KP671523	197	KP671540	546	Alström *et al*. (2015)
A. nilghiriensis	AMNH 801363	Kadai Kanal, Palni hills, Tamil Nadu, India			KP671524	197	KP671541	546	Alström *et al*. (2015)
A. novaeseelandiae		Auckland Islands, New Zealand	KC545397	563	KC545397	798			Gibb *et al*. (2015)
A. nyassae		Katanga, Democratic Republic of the Congo			JQ796089	798			Finch *et al*. (2013)

Species	**Sample**	**Collecting locality**	**CO1**	**Length (nt)**	**cyt *b***	**Length (nt)**	***Mb***	**Length (nt)**	**Reference**
*A. nyassae***	FMNH 440490	Rumphi, Malawi			KJ456196	798	KJ454752	554	Price *et al*. (2014)
A. nyassae	MMB --	Ntchisi Forest Reserve, Malawi	MF871985	242			MF872071	355	*This study*
A. petrosus	ZMUC 116892	Denmark	FJ465301	563					Aliabadian *et al*. (2009)
A. petrosus	NHMO-BC333	Hornoya, Finnmark, Norway	GU571252	563					Johnsen *et al*. (2010)
A. petrosus		Hirsholmene, Denmark			U46772	798			Arctander *et al.* 1996
A. pratensis		France			AF096460	750			Pasquet *et al.* (2002)
A. pratensis	UWBM 56714	Noyabr`sk, Yamalo-Nenetskiy Avtonomnyi Okrug, Tyumenskaya Oblast`, Russia	GQ481353	563					Kerr *et al.* (2009a)
A. pratensis	UWBM 49677	Teriberka, Murmanskaya Oblast, Russia	GQ481354	563					Kerr *et al.* (2009a)

Species	**Sample**	**Collecting locality**	**CO1**	**Length (nt)**	**cyt *b***	**Length (nt)**	***Mb***	**Length (nt)**	**Reference**
A. pratensis	NRM 946483	Kuokkel, Abisko, Norrbotten, Sweden	GU571731	563					Johnsen *et al*. (2010)
A. pratensis	NHMO-BC15	Porsanger, Finnmark, Norway	GU571254	563					Johnsen *et al*. (2010)
A. pratensis	NHMO-BC281	Ovre Heimdalen, Oppland, Norway	GU571257	563					Johnsen *et al*. (2010)
A. pratensis	USNM 621290	Mildenhall Air Force Base, Suffolk, England	JN801265	563					Stoeckle & Kerr (2012)
A. pratensis	NRM 976548	Sweden					KP671542	598	Alström *et al*. (2015)
A. pratensis		Christiansø, Denmark			U46774	798			Arctander *et al.* 1996
A. pseudosimilis	NMBV 05041	Driekop, Philippolis, Free State, South Africa	MF871986	242	MF871881	426			*This study*
A. richardi	UWBM 59819	Choibalsan, Dornod Aymag, Dornod, Mongolia	GQ481355	563					Kerr *et al.* 2009a
A. richardi	UWBM 57822	Tov Aymag, Mongolia	GQ481356	563					Kerr *et al.* 2009a

Species	Sample	Collecting locality	CO1	Length (nt)	cyt *b*	Length (nt)	*Mb*	Length (nt)	Reference
A. richardi	NHMO-BC526	Jomfruland, Telemark, Norway	GU571258	563					Johnsen *et al*. (2010)
A. richardi	NHMO-BC551	Ona, More og Romsdal, Norway	GU571259	563					Johnsen *et al*. (2010)
A. roseatus		Janakpur, Nepal			KJ456195	798			Price *et al*. (2014)
A. rubescens	ROM (1B-438)	North America	AY666215	563					Hebert *et al*. (2004)
A. rubescens	UWBM 47533	Badzhal`skiy Khrebet, Khabarovskiy Kray, Russia	GQ481357	563					Kerr *et al.* 2009a
A. rubescens	NRM 20066116	Anadyr, Chukotka, Russia			KP671525	798	KP671543	581	Alström *et al*. (2015)
A. rubescens	UWBM 44206	Magadanskaya Oblast, Russia	GQ481358	563					Kerr *et al.* 2009a
A. rubescens	UWBM 44079	Kamchatka, Milkovo, Russia	GQ481359	563					Kerr *et al.* 2009a
A. ruficollis	AMNH 701490	Buru, Indonesia			KP671533	798			Alström *et al*. (2015)
A. rufulus	FMNH 358350	Sibuyan, Philippines			KJ456194	798	KJ454751	598	Price *et al*. (2014)

Species	Sample	Collecting locality	CO1	Length (nt)	cyt *b*	Length (nt)	*Mb*	Length (nt)	Reference
A. rufulus	ZMUC 116871	Philippines					KP671544	598	Alström *et al*. (2015)
A. similis	NMK 200817	Nairobi National Park, Kenya			JQ796079	798			Finch *et al*. (2013)
A. similis	NMK 10880-640	Ol Donyo Sabuk, Kenya			JQ796080	798			Finch *et al*. (2013)
A. similis	NMK 3660-9267	Elmenteita, Kenya			JQ796081	798			Finch *et al*. (2013)
A. similis	NMK 366A-2502	Chyulu Hills, Kenya			JQ196083	798			Finch *et al*. (2013)
A. similis	NMK 366A-2504	Chyulu Hills, Kenya			JQ796084	798			Finch *et al*. (2013)
A. similis	NHM AV 5170	Haifa, Israel			JQ796087	798			Finch *et al*. (2013)
A. similis	NHM AV 12417	Nahshonim, Israel			JQ796088	798			Finch *et al*. (2013)
A. similis	FH45893	Kranskop, Memel, South Africa	MF871954	563	MF871866	798	MF872058	586	*This study*
A. similis	NMBV 6876	Harrismith, Free State, South Africa			MF871883	424			*This study*
A. similis	NMBV 7572	Zeekoegat, Rouxville District, Free State, South Africa	MF871955	563	MF871867	798	MF872060	586	*This study*

Species	Sample	Collecting locality	CO1	Length (nt)	cyt *b*	Length (nt)	*Mb*	Length (nt)	Reference
A. similis	NMBV 7594	Zeekoegat, Rouxville District, Free State, South Africa	MF871956	563	MF871868	798	MF872056	586	*This study*
A. similis	NMBV 7601	Kloofeind, Bloemfontein, Free State, South Africa	MF871957	563	MF871869	798	MF872059	586	*This study*
A. sokokensis	Voelker 1098	Arabuko-Sokoke, Kenya			NS	735			Voelker (1999)
A. s. spinoletta	ZMUC 137278	Italy	FJ465306	563					Aliabadian *et al*. (2009)
A. spinoletta	UWBM 67639	Erzin, Erzinskiy Kozhuun, Tuva, Russia	GQ481363	563					Kerr *et al.* 2009a
A. spinoletta	UWBM 46523	Alma-Ata, Almaty Oblysy, Kazakhstan	GQ481364	563					Kerr *et al.* 2009a
A. spinoletta	UWBM 57991	Dzavhan, Mongolia	GQ481365	563					Kerr *et al.* 2009a
A. spinoletta coutellii		Israel	LN650645	563	LN650643	798			Garner *et al.* unpubl. data

Species	**Sample**	**Collecting locality**	**CO1**	**Length (nt)**	**cyt *b***	**Length (nt)**	***Mb***	**Length (nt)**	**Reference**
A. spinoletta coutellii		Israel	LN650646	563					Garner *et al.* unpubl. data
A. spinoletta		Swiss Alps, Switzerland			U46773	798			Arctander *et al.* 1996
*A. sprague*ii		Missouri, United States of America	DQ433315	563					Kerr *et al.* (2007)
A. sylvanus		Kipsung, Nepal			KJ456197	798	KJ454753	596	Price *et al*. (2014)
A. trivialis	NRM 976393	Umea, Vasterbotten, Sweden	GU571733	563	AY228048	798	AY228285	598	Ericson *et al*. (2000) Johnsen *et al*. (2010)
A. trivialis	UWBM 49488	Krasnoufimsk, Sverdlovskaya Oblast, Russia	GQ481369	563					Kerr *et al.* 2009a
A. trivialis	UWBM 51790	Chunoyar railroad station, Bogurchanskiy Rayon, Krasnoyarskiy Kray, Russia	GQ481370	563					Kerr *et al.* 2009a

Species	**Sample**	**Collecting locality**	**CO1**	**Length (nt)**	**cyt *b***	**Length (nt)**	***Mb***	**Length (nt)**	**Reference**
A. trivialis	NHMO-BC54	Hurdal, Akershus, Norway	GU571260	563					Johnsen *et al*. (2010)
A. trivialis	NRM 20026284	Luovaure, Kabdalis, Sweden	GU571734	563					Johnsen *et al*. (2010)
A. trivialis	ZMUC 131385	Niedersachsen, Germany					KJ454754	555	Price *et al*. (2014)
A. trivialis		Christiansø, Denmark			U46775	798			Arctander *et al.* 1996
*A. vaalensis****	NMK 2524	Sumbawanga, Tanzania			JQ796090	798			Finch *et al*. (2013)
A. vaalensis	EL 9929	Salujinga, Zambia			MF871893	257			*This study*
A. vaalensis	NMBV 7623	Sandymount Park, Fauresmith, Free State, South Africa	MF871958	563	MF871870	798	MF872057	586	*This study*
A. vaalensis	NMZB 92456	Somabhula District, Zimbabwe	MF871989	242	MF871885	424			*This study*
A. vaalensis	NMZB85005	Four Rivers Camp, Okavango Delta, Botswana	MF871988	242	MF871884	424			*This study*

Species	Sample	Collecting locality	CO1	Length (nt)	cyt *b*	Length (nt)	*Mb*	Length (nt)	Reference
A. vaalensis	TM29570	ca. 2 miles S of Bimbe, Humpata Plateau, Angola	MF871987	242	MF871898	197			*This study*
Ma. ameliae	NMZB 2995	Linyanti, Caprivi, Namibia			MF871894	257			*This study*
Ma. ameliae	NMZB 64023	Marimba River, Harare, Zimbabwe			MF871886	426			*This study*
Ma. ameliae	NMZB 74495	Kazuma Pan, Zimbabwe	MF871990	242					*This study*
Ma. ameliae	NMZB 80052	30 miles NNW of Nanyuki, Kenya	MF871991	242	MF871887	424			*This study*
Ma. capensis	BE68403	Verloren Vallei Nature Reserve, Mpumalanga, South Africa	MF871959	563	MF871871	798	MF872050	586	*This study*
Ma. capensis	BE68425	Verloren Vallei Nature Reserve, Mpumalanga, South Africa	MF871960	563	MF871872	798	MF872051	586	*This study*

Species	**Sample**	**Collecting locality**	**CO1**	**Length (nt)**	**cyt *b***	**Length (nt)**	***Mb***	**Length (nt)**	**Reference**
Ma. capensis	BE68432	Kranskop, Memel, Free State, South Africa	MF871961	563	MF871873	798	MF872052	586	*This study*
Ma. capensis	CA09956	Verloren Vallei Nature Reserve, Mpumalanga, South Africa	MF871962	563	MF871874	798	MF872053	586	*This study*
Ma. capensis	CA10018	Langkloof 390, Wakkerstroom, Mpumalanga, South Africa	MF871963	563	MF871875	798	MF872054	586	*This study*
Ma. capensis	CC93116	Verloren Vallei Nature Reserve, Mpumalanga, South Africa	MF871964	542	MF871876	798	MF872055	586	*This study*
Ma. capensis	NMZB 85556	Hatcliffe Estate, Borrowdale, Zimbabwe	MF871992	242					*This study*
Ma. croceus		Uganda			KP671531	197	KP671552	598	Alström *et al*. (2015)

Species	Sample	Collecting locality	CO1	Length (nt)	cyt *b*	Length (nt)	*Mb*	Length (nt)	Reference
Ma. croceus	EL 12434	Mkambati District, Eastern Cape, South Africa			MF871899	197			*This study*
Ma. fuelleborni	NMZB 39066	Vonga Plains, Central Angola	MF871993	242					*This study*
Ma. fuelleborni	NMZB 39465	Mayav, northern Kabompo District, Zambia	MF871994	242					*This study*
Ma. grimwoodi	NMZB 32716	Chitunta Plain, Mwinilunga, Zambia			MF871897	224			*This study*
Mo. aguimp	MBM 5840	Northern Cape, South Africa			AF526449	798			Voelker (2002)
Mo. aguimp	UWBM 53198	KwaZulu-Natal, South Africa			AF526466	798			Voelker (2002)
Mo. aguimp	MNHN 17-41	Malawi					GQ369649	598	Fuchs *et al.* (2009)
Mo. aguimp		Uganda					KP671546	598	Alström *et al*. (2015)

Species	Sample	Collecting locality	CO1	Length (nt)	cyt *b*	Length (nt)	*Mb*	Length (nt)	Reference
Mo. alba	YIO-31195	Tokushima-shi, Tokushima, Shikoku-chiho, Japan	AB843601	563					Saitoh *et al.* (2015)
Mo. alba	UWBM 46304	Gorno-Altay Republic, Russia			AF526437	798			Voelker (2002)
Mo. alba	NRM 976193	Sweden					AY228307	586	Ericson *et al*. (2000)
Mo. alba					EU167005	798			Brown *et al.* (2008)
Mo. alba	NRM 2001630	Sweden	FJ465345	563					Aliabadian *et al*. (2009)
Mo. alba	USNM 645855	Bagram Air Base, Bagram, Parwan, Afghanistan	KP252219	563					Dove *et al. unpubl. data*
Mo. alba	UWBM 46410	Almaty Obl., Kazakhstan					KP671547	598	Alström *et al*. (2015)
Mo. alba		Anqing, Anhui Province, China	KT736087	563	KT736087	798			Dong *et al.* (2016)
Mo. bocagii	Melo: GA59729	São Tomé					EU680612	598	Johansson *et al.* 2008

Species	**Sample**	**Collecting locality**	**CO1**	**Length (nt)**	**cyt *b***	**Length (nt)**	***Mb***	**Length (nt)**	**Reference**
Mo. bocagii	AMNH 268506	São Tomé			KP671528	798			Alström *et al*. (2015)
Mo. capensis	MBM 5842	Northern Cape, South Africa			AF526448	798			Voelker (2002)
Mo. capensis		Uganda					KP671548	598	Alström *et al*. (2015)
Mo. cinerea	YIO-63353	Taketomi-cho, Yaeyama-gun, Nansei Island, Okinawa, Japan	AB843604	563					Saitoh *et al.* (2015)
Mo. cinerea	YIO-62585	Kijimadaira-mura, Shimotakai-gun, Nagano, Japan	AB843606	563					Saitoh *et al.* (2015)
Mo. cinerea	UWBM 44455	Magadanskaya Oblast`, Russia			AF526460	798			Voelker (2002)
Mo. cinerea	UWBM 46556	Almaty Oblysy, Alma-Ata, Tien Shan, Kazakhstan	GQ482192	563					Kerr *et al.* (2009a)

Species	**Sample**	**Collecting locality**	**CO1**	**Length (nt)**	**cyt *b***	**Length (nt)**	***Mb***	**Length (nt)**	**Reference**
Mo. cinerea	UWBM 46534	Almaty Oblysy, Alma-Ata, Tien Shan, Kazakhstan					KC007670	598	Barker *et al.* (2013)
Mo. cinerea		Varberg, Sweden					KJ454837	598	Price *et al*. (2014)
Mo. cinerea		Humla District, Nepal			KJ456347	798			Price *et al*. (2014)
Mo. cinerea		China	KR092187	563	KR092187	798			Zhang *et al*. (2016)
Mo. citreola	UWBM 49351	Kurskaya Oblast`, Russia			AF526440	798			Voelker (2002)
Mo. citreola	UWBM 46336	Avtonomnaya Respublika, Buryatia, Russia			AF526442	798			Voelker (2002)
Mo. citreola	UWBM 66456	Baikal, Russia					KJ454838	555	Price *et al*. (2014)
Mo. clara	UWBM 53178	KwaZulu-Natal, South Africa			AF526467	798			Voelker (2002)
Mo. clara	FMNH 355292	KwaZulu-Natal, South Africa			AF526469	798			Voelker (2002)
Mo. clara		South Africa					KP671549	598	Alström *et al*. (2015)

Species	**Sample**	**Collecting locality**	**CO1**	**Length (nt)**	**cyt *b***	**Length (nt)**	***Mb***	**Length (nt)**	**Reference**
Mo. flava	YIO-63510	Yaeyama-gun, Nansei Island, Okinawa, Japan	AB843607	563					Saitoh *et al.* (2015)
Mo. flava	YIO-63509	Yaeyama-gun, Nansei Island, Okinawa, Japan	AB843608	563					Saitoh *et al.* (2015)
Mo. flava	UWBM 43953	Chukotskiy Avtonomnyy Okrug, Russia			AF526456	798			Voelker (2002)
Mo. flava	UWBM 47176	Khabarovskiy Kray, Russia			AF526457	798			Voelker (2002)
Mo. flava	UWBM47505	Sakhalinskaya Oblast`, Russia			AF526458	798			Voelker (2002)
Mo. flava	UWBM47504	Sakhalinskaya Oblast`, Russia			AF526468	798			Voelker (2002)
Mo. flava	NHMO-BC271	Njoallunjaure, Rensjon, Torne Lappmark, Norrbotten, Sweden	GU571491	563					Johnsen *et al*. (2010)

Species	**Sample**	**Collecting locality**	**CO1**	**Length (nt)**	**cyt *b***	**Length (nt)**	***Mb***	**Length (nt)**	**Reference**
Mo. flava	NRM 976539	Njoallunjaure, Rensjon, Torne Lappmark, Norrbotten, Sweden	GU571985	563					Johnsen *et al*. (2010)
Mo. flava	USNM 645814	Bagram Air Base, Parwan, Afghanistan	KP252226	563					Dove *et al. unpubl. data*
Mo. flava		Västergötland, Sweden					KP671550	598	Alström *et al*. (2015)
Mo. flaviventris	FMNH 352834	Madagascar			AF526438	798			Voelker (2002)
Mo. flaviventris	FMNH 52832	Madagascar			AF526446	798			Voelker (2002)
Mo. flaviventris		Madagascar					KP671551	598	Alström *et al*. (2015)
Mo. grandis	NSMT-A17712	Izumo, Shimane, Chugoku, Japan	AB842951	558					Saitoh *et al.* (2015)
Mo. grandis	NSMT-A15445	Karuizawa-cho, Kitasaku-gun, Nagano, Japan	AB842954	563					Saitoh *et al.* (2015)
Mo. grandis	NSMT-A17703	Shimane Nature Museum of Mount	AB842955	563					Saitoh *et al.* (2015)

Species	Sample	Collecting locality	CO1	Length (nt)	cyt *b*	Length (nt)	*Mb*	Length (nt)	Reference
		Sanbei, Shimane-Ken, Chugoku, Japan							
Mo. lugens		Korea	KU246035	563	KU246035	798			Park *et al. unpubl. data*
Mo. lugens	UWBM 44605	Kamchatka, Russia			AF526462	798			Voelker (2002)
Mo. lugens	UWBM 47267	Sakhalinskaya Oblast`, Russia			AF526464	798			Voelker (2002)
Mo. madaraspatensis	AMNH 23223	Betrabati, Nepal			AF526435	798			Voelker (2002)
Mo. madaraspatensis	AMNH 5741	Betrabati, Nepal			KJ456348	798			Price *et al*. (2014)
Mo. tschutschensis	UWBM 53913	Deadhorse, Foothills of Brooks Range, Alaska, Unites States of America	DQ433817	563					Kerr *et al.* (2007)
Mo. tschutschensis	UWBM 43941	Along Avtatkuul River, Anadyr, Chukotskiy Avtonomnaya Okrug, Russia	GQ482207	563					Kerr *et al.* 2009a

Species	**Sample**	**Collecting locality**	**CO1**	**Length (nt)**	**cyt *b***	**Length (nt)**	***Mb***	**Length (nt)**	**Reference**
T. tenellus	ZMUC 75667	North Para Mountains, Same District, Tanzania			KP671534	316	KP671554	598	Alström *et al*. (2015)
T. tenellus	ZMUC 75673	Kidugallo, Morogoro District, Tanzania			KP671535	316			Alström *et al*. (2015)
Emberiza flaviventris	UMMZ 233274	Captive					JX515374	598	Olsson *et al.* (2013)
Emberiza flaviventris	MTD C53594	Captive	KP877699	563					Päckert *et al.* (2015)
Emberiza flaviventris	ZMUC 129750	Iringa, Tanzania			KP877786	798			Päckert *et al.* (2015)
Emberiza sahari	DZUG U1072	Mauritania					JX515384	598	Olsson *et al.* (2013)
Emberiza sahari		Primorskiy Kray, Russia	KP877688	563					Päckert *et al.* (2015)
Emberiza sahari		Marakesh, Morocco			KP877722	798			Päckert *et al.* (2015)

*Accessioned into GenBank as *Anthus cinnamomeus*, but our results indicate that it is actually a misidentified *A. leucophrys*.

**Accessioned into GenBank as *Anthus similis*, but our results indicate that it is actually a misidentified *A. nyassae*. Some authors treat *A. nyassae* as a junior synonym of *A. similis*.

***Accessioned into GenBank as *Anthus similis*, but our results indicate that it is actually a misidentified *A. vaalensis*.

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Table S4. Number of ingroup species, size of the dataset and model of sequence evolution selected for each of the nine contemporary and museum datasets used to infer the phylogenetic relationships of the avian family Motacillidae, as well as the total molecular evidence phylogeny.

Dataset	Contents	Ingroup species	No. of sequences	Dataset length (nt)	Variable sites	1st-codon mutations	2nd-codon mutations	3rd-codon mutations	Model	I	Γ
a	CO1, cyt *b* & *Mb* Concatenated	15	41	1 813	500	16	7	111	GTR+I+Γ	0.418	0.460
b	CO1 & cyt *b* Concatenated (Contemp.)	22	59	1 298	480	10	2	105	GTR+I+Γ	0.532	1.111
c	CO1 & cyt *b* Concatenated (Museum)	29	68	439	156	2	1	38	GTR+I+Γ	0.599	1.503
d	CO1 (Contemp.)	31	104	563	206	4	0	52	GTR+I+Γ	0.608	2.122
e	CO1 (Museum)	38	121	242	84	1	0	24	GTR+I	0.651	-
f	cyt *b* (Contemp.)	39	94	735	300	6	2	53	GTR+I+Γ	0.499	0.971
g	cyt *b* (Museum)	49	109	197	88	1	1	14	HKY+I+Γ	0.353	0.532
h	*Mb* (Contemp.)	28	60	515	106	-	-	-	HKY+Γ	-	0.930
i	*Mb* (Museum)	30	61	355	83	-	-	-	HKY+Γ	-	1.350
j	Total molecular evidence	56	181	1 959	687	10	2	105	GTR+I+Γ	0.505	0.666

nt: nucleotides; I: Proportion of invariant sites; Γ: Gamma distribution shape parameter.

Table S5. Uncorrected cyt *b* p-distance ranges between the currently recognised *Anthus* species.

	A. berthelotii	*A. brachyurus*	*A. caffer*	*A. campestris*	*A. cervinus*	*A. chloris*	*A. cinnamomeus*	*A. correndera*	*A. crenatus*	*A. hodgsoni*	*A. leucophrys*	*A. lineiventris*	*A. melindae*
A. brachyurus	10.6–10.7												
A. caffer	10.2-10.4	6.9											
A. campestris	3.4–3.7	10.1	10.2–10.3										
A. cervinus	8.6–8.7	9.3	8.8	8.0–8.3									
A. chloris	9.8–10.3	9.7–9.9	9.1–9.4	8.7–9.3	8.6								
A. cinnamomeus	4.6–5.9	9.0–9.4	9.5–9.7	5.6–6.1	7.9–8.2	9.0–9.4							
A. correndera	9.3–9.5	8.4	8.7	8.7–8.8	7.1	8.2–8.4	8.3–8.7						
A. crenatus	9.5–10.1	8.2–8.4	8.7–9.0	9.5–9.7	8.8–9.0	8.8–9.3	8.4–9.2	9.4–9.5					
A. hodgsoni	10.1–10.6	9.9–10.3	10.2–10.6	9.9–10.3	6.9–7.2	8.7–9.1	9.5–10.4	8.2–8.6	9.4–9.9				
A. leucophrys	5.4–6.5	10.6–11.6	10.2–10.8	6.1–7.1	8.3–8.9	10.3–10.6	3.9–6.7	8.8–9.7	9.6–10.2	10.3–11.0			
A. lineiventris	9.0–9.4	9.3	9.4	9.1–9.4	8.6	8.4–8.7	8.7–9.0	9.5	4.2–4.5	9.5–9.9	9.6–10.2		
A. melindae	6.9–7.3	12.1	10.9	7.9	9.4	11.3	6.8–7.9	10.7	11.2–11.3	11.2–11.4	3.7–3.9	11.2	

	A. berthelotii	*A. brachyurus*	*A. caffer*	*A. campestris*	*A. cervinus*	*A. chloris*	*A. cinnamomeus*	*A. correndera*	*A. crenatus*	*A. hodgsoni*	*A. leucophrys*	*A. lineiventris*	*A. melindae*
A. nyassae	6.5–6.8	10.3	10.9	6.9–7.1	8.4	9.1–9.4	6.3–7.0	9.5	9.5–9.7	9.9–10.3	6.6–7.5	9.1	7.3
A. petrosus	9.4–9.5	10.2	9.9	9.0	6.8	9.7–9.9	9.0–9.3	9.3	10.1–10.3	8.6–9.0	9.5–10.4	10.2	11.3
A. pratensis	8.6–8.7	9.8	8.8	8.6	4.8	9.5–9.8	8.3–9.2	8.0	9.4–9.7	7.6–8.0	8.8–9.7	9.3	10.2
A. roseatus	8.0–8.2	9.7	9.0	8.0–8.3	4.5	8.8–9.1	7.6–8.1	7.3	9.1–9.4	6.9–7.3	7.4–8.3	9.1	8.6
A. rubescens	7.9–8.0	8.3	7.3	7.9–8.0	4.4	8.0–8.3	6.9–7.2	7.1	9.3–9.5	7.5–7.6	7.7–8.6	9.0	9.3
A. ruficollis	9.3–9.4	9.1	9.1	9.0	6.4	8.2	8.2–8.9	7.3	9.3–9.4	6.3–6.5	8.8–10.1	9.1	10.3
A. rufulus	5.4–5.6	8.8	9.4	5.9–6.1	7.6	8.8–9.1	1.2–1.8	8.4	8.6–8.8	9.3–9.7	5.0–6.8	8.7	7.5
A. similis (RSA)	5.4–6.3	9.9–10.1	9.9–10.3	5.9–6.8	8.6–9.3	9.4–9.8	5.6–6.7	9.0–9.9	9.1–9.8	9.3–10.2	5.4–6.9	9.3–9.7	7.1–7.5
A. similis (EA & ME)	5.3–6.3	10.1–11.0	10.3–11.2	6.3–6.7	8.0–8.6	8.6–9.4	4.8–6.1	9.3–9.9	9.5–9.9	9.7–10.5	5.6–7.2	9.0–9.3	7.3–7.6
A. sokokensis	10.3–10.5	8.2	7.1	9.9–10.3	7.9	9.4–9.7	9.7–10.0	8.4	9.3–9.5	8.4–8.6	9.9–10.6	9.5	11.3
A. spinoletta	8.4–9.9	9.9–10.3	9.3–10.3	8.3–9.4	4.8–7.2	8.7–10.1	8.4–10.0	7.3–8.8	9.9–10.3	7.8–9.1	8.3–10.5	9.9–10.1	10.1–11.7
A. sylvanus	9.1–9.4	10.9	10.7	8.7	8.8	9.8–10.1	8.2–8.7	9.9	10.1–10.2	10.6–10.7	8.8–9.5	9.5	10.5
A. trivialis	8.2–8.4	8.4	8.4	8.2–8.4	5.4	7.5–7.8	7.2–7.9	6.3	8.3–8.4	3.7–4.1	8.1–8.7	8.8	9.1
A. vaalensis	5.7–5.9	10.2	10.3	6.3	8.0	9.8	4.2–5.1	8.8	9.7–9.8	10.2	2.2–3.0	9.3	4.2

Table S5 (continued**).** Uncorrected cyt *b* p-distance ranges between the currently recognised *Anthus* species.

	A. nyassae	*A. petrosus*	*A. pratensis*	*A. roseatus*	*A. rubescens*	*A. ruficollis*	*A. rufulus*	*A. similis (RSA)*	*A. similis (EA & ME)*	*A. sokokensis*	*A. spinoletta*	*A. sylvanus*	*A. trivialis*
A. petrosus	9.7												
A. pratensis	9.0	6.0											
A. roseatus	8.3	6.8	4.2										
A. rubescens	8.6	6.5	3.8	4.8									
A. ruficollis	8.7	8.3	6.7	6.1	6.3								
A. rufulus	6.3	8.8	8.6	7.6	6.7	7.9							
A. similis (RSA)	6.9–7.5	9.1–10.2	8.8–9.8	7.9–8.6	8.2–8.8	9.7–9.8	6.0–6.1						
A. similis (EA & ME)	4.2–4.6	9.3–10.2	8.7–9.4	7.6–8.0	7.6–8.6	8.2–9.3	4.9–6.0	5.9–7.3					
A. sokokensis	9.8	9.8	8.2	7.8	6.8	8.3	9.4	9.8–10.2	9.5–10.3				
A. spinoletta	8.7–9.8	1.2–5.9	3.7–5.9	4.4–6.9	3.7–6.7	6.4–8.7	8.2–9.5	8.7–10.3	8.0–10.3	7.5–9.9			
A. sylvanus	9.7	10.9	10.1	9.0	8.8	10.5	8.7	9.5–9.7	9.1–9.5	10.5	9.7–11.3		
A. trivialis	8.0	7.5	6.1	5.4	5.3	5.4	7.2	7.5–8.3	7.6–8.4	8.0	6.0–7.9	9.0	

	A. nyassae	*A. petrosus*	*A. pratensis*	*A. roseatus*	*A. rubescens*	*A. ruficollis*	*A. rufulus*	*A. similis (RSA)*	*A. similis (EA & ME)*	*A. sokokensis*	*A. spinoletta*	*A. sylvanus*	*A. trivialis*
A. vaalensis	6.1	10.2	9.0	7.6	7.3	8.7	4.9	4.5–6.7	5.0–5.9	9.7	8.3–10.3	8.6	7.6

Figure S1. Maximum Likelihood phylogeny of the avian family Motacillidae inferred from the contemporary CO1 dataset (563 nt), with bootstrap (upper) and Bayesian posterior probability (lower) support values recovered from the concatenated contemporary dataset / CO1 contemporary dataset / cyt *b* contemporary dataset analyses, indicated in that order, transferred onto the relevant nodes. A dash indicates support values < 65 % for Maximum Likelihood and < 90 % for Bayesian Inference, while an asterisk indicates that representatives of that taxon were missing from that particular dataset. Only nodes that were supported by at least one of the analyses are annotated. RSA: Republic of South Africa.

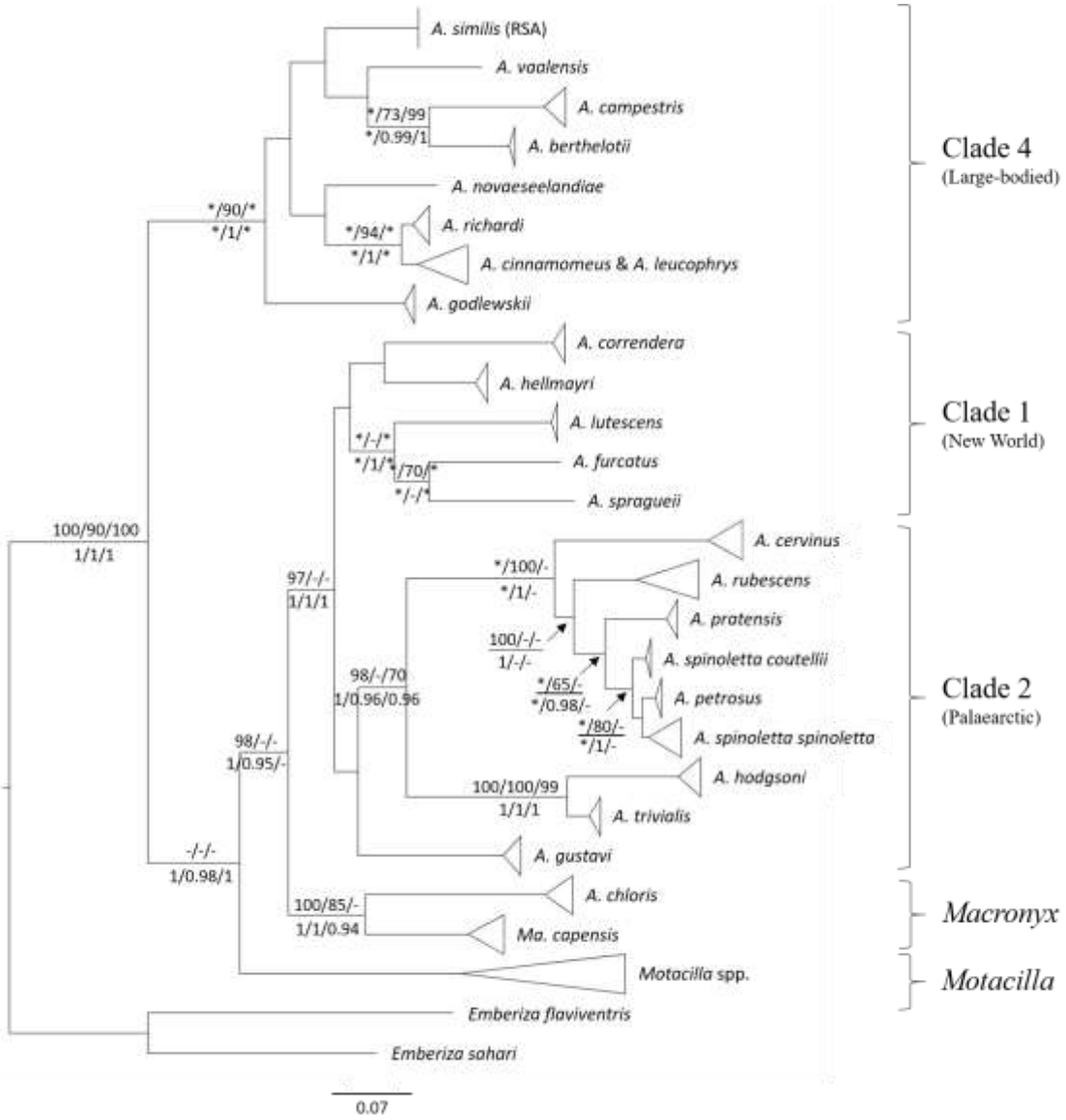

Figure S2. Maximum Likelihood phylogeny of the avian family Motacillidae inferred from the contemporary cyt *b* dataset (735 nt). Bootstrap (upper) and Bayesian posterior probability (lower) support values are given in the order concatenated contemporary dataset / CO1 contemporary dataset / cyt *b* contemporary dataset. A dash indicates support values < 65 % and < 90 % for Maximum Likelihood and Bayesian Inference, respectively, while an asterisk indicates that representatives of that taxon were missing from that particular dataset. Only nodes that were supported by at least one of the analyses are annotated. DRC: Democratic Republic of the Congo; RSA: Republic of South Africa.

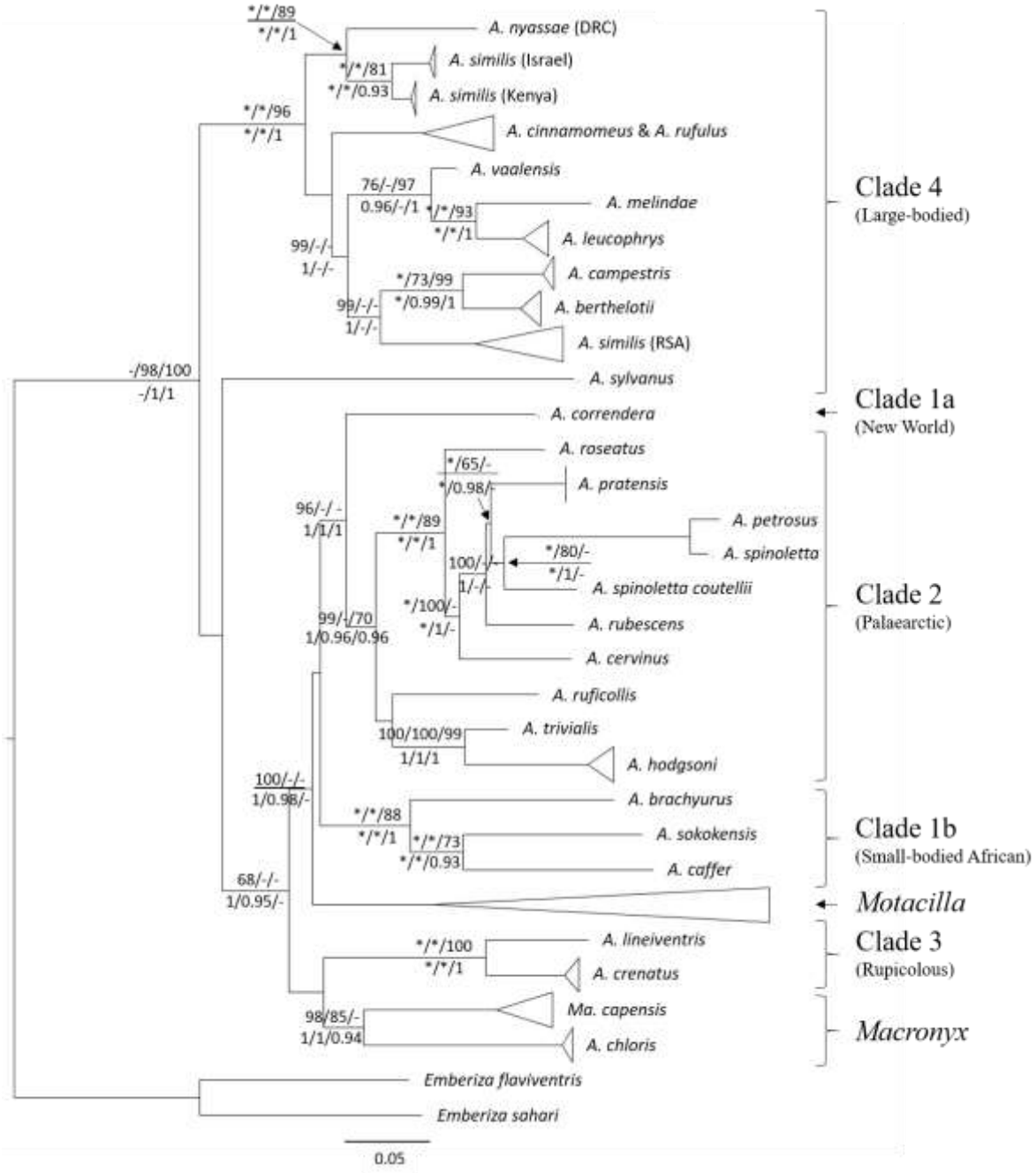

Figure S3. Maximum Likelihood phylogeny of the avian family Motacillidae inferred from the contemporary myoglobin dataset (515 nt). Bootstrap (top line) and Bayesian posterior probability (bottom line) support values are presented for each node. Maximum Likelihood branch support was tested with 1,000 non-parametric bootstrap replicates, while Bayesian Inference posterior probabilities are based on the 9,000 samples retained from a 10 million generation run.

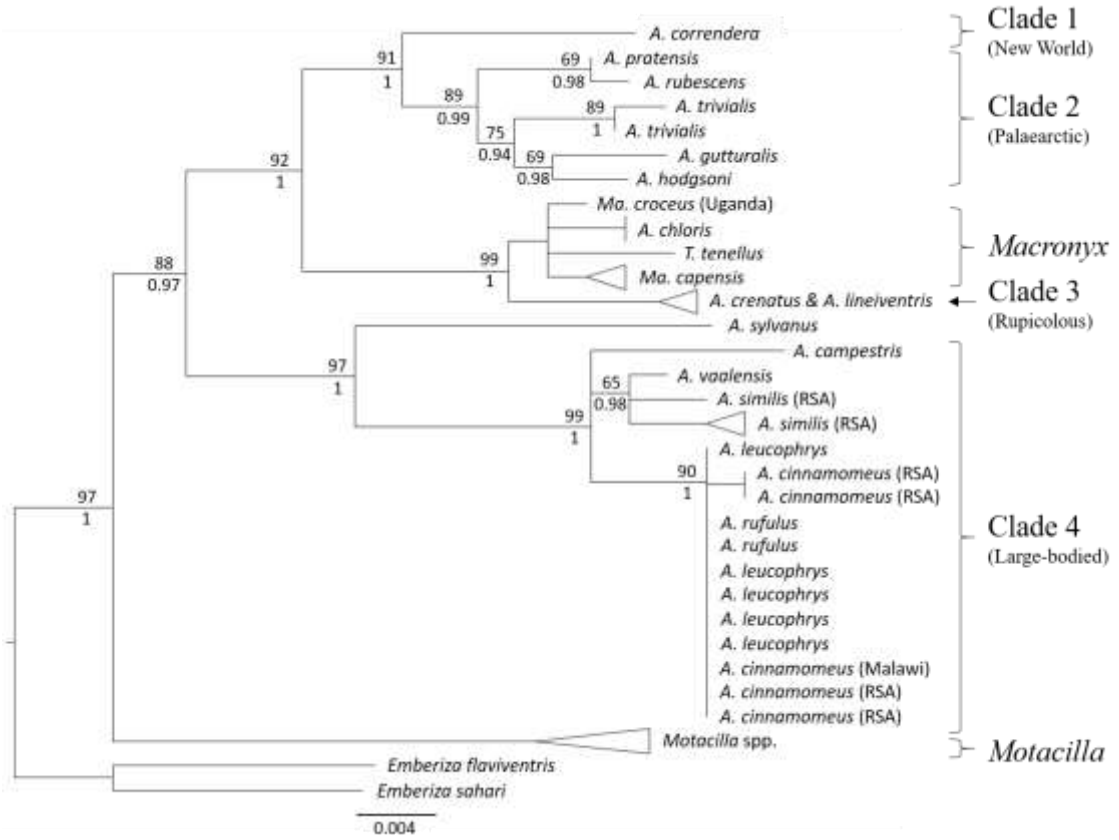

Figure S4. Phylogeny of the avian family Motacillidae inferred from the CO1 dataset containing museum and contemporary samples (242 nt). Bootstrap (above) and Bayesian posterior probability (below) support values are presented for nodes with statistical support.

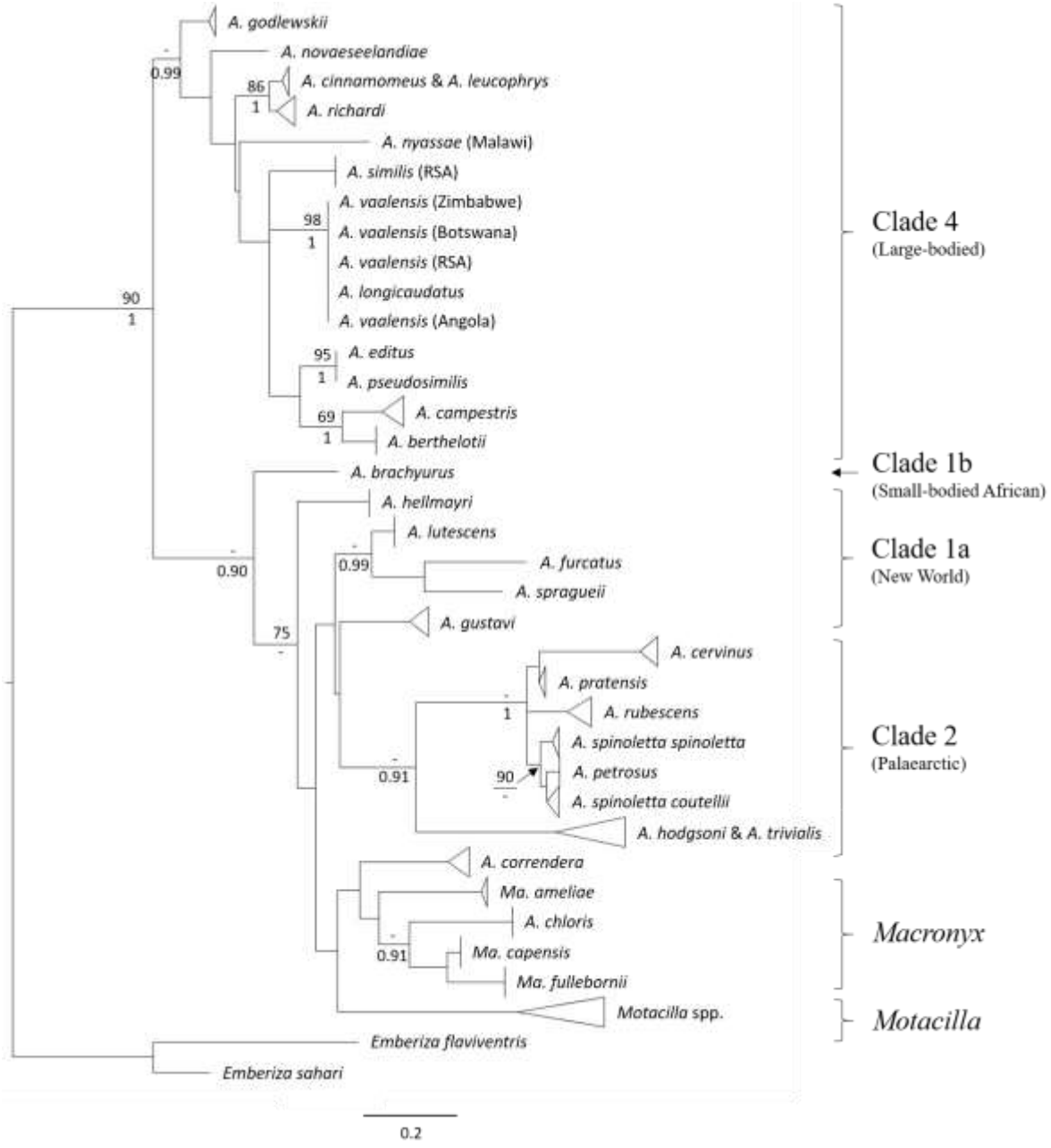

Figure S5. Maximum Likelihood phylogeny of the avian family Motacillidae inferred from the cyt *b* dataset containing museum and contemporary samples (197 nt). Bootstrap (top line) and Bayesian posterior probability (bottom line) support values are presented for nodes with statistical support.