

Supplementary material

1 Appendix 1. A summary of the literature that investigated the breeding synchrony and
 2 extra-pair paternity in birds.

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4 (a) Within-species

Species	Population -wide	Local	Individual	References
Alpine water pipit <i>Anthus spinoletta</i>	Negative	–	–	Reyer et al. 1997
American redstart <i>Setophaga ruticilla</i>	Unrelated	–	–	Perreault et al. 1997
Barn swallow <i>Hirundo rustica</i>	Unrelated	–	–	Møller 1994
Barn swallow <i>Hirundo rustica</i>	–	Negative	Unrelated	Saino et al. 1999
Black swan <i>Cygnus atratus</i>	Unrelated	–	–	Kraaijeveld et al. 2004
Black-throated blue warbler <i>Dendroica caerulescens</i>	Unrelated	Positive	–	Chuang et al. 1999
Black-throated blue warbler <i>Dendroica caerulescens</i>	–	Unrelated	–	Chuang-Dobbs et al. 2001
Blue tit <i>Cyanistes caeruleus</i>	–	Unrelated	–	García-Navas et al. 2014
Bluethroat <i>Luscinia s. svecica</i>	Unrelated	Negative	–	Johnsen and Lifjeld 2003
Clay-colored rubin <i>Turdus grayi</i>	Positive	–	–	Stutchbury et al. 1998
Common yellowthroat <i>Geothlypis trichas</i>	Negative	Negative	Negative	Thusius et al. 2001
Eastern bluebird <i>Sialia sialis</i>	Negative	–	–	Meek et al. 1994
Eastern bluebird <i>Sialia sialis</i>	Positive	Positive	–	Stewart et al. 2010
Eastern kingbird <i>Tyrannus tyrannus</i>	Unrelated	Unrelated	–	Rowe et al. 2001
Eastern phoebes <i>Sayornis phoebe</i>	Negative	–	–	Conrad et al. 1998
Gadwall <i>Anas strepera</i>	Unrelated	–	–	Peters et al. 2003
Golden whistler <i>Pachycephala pectoralis</i>	–	Negative	–	van Dongen and Mulder 2009
Great reed warbler <i>Acrocephalus arundinaceus</i>	Unrelated	Unrelated	–	Debora et al. 2004
Great reed warbler <i>Acrocephalus arundinaceus</i>	Unrelated	Unrelated	–	Arlt et al. 2004
Great tit <i>Parus major</i>	–	Negative	–	Sabine et al. 1998
Great tit <i>Parus major</i>	Negative	–	–	Strohbach et al. 1998
Hooded warbler <i>Wilsonia citrina</i>	Positive	–	–	Stutchbury et al. 1994
House finch <i>Carpodacus mexicanus</i>	Unrelated	–	–	Lindstedt et al. 2007
House Sparrow <i>Passer domesticus</i>	Unrelated	Unrelated	–	Stewart et al. 2006
House wren <i>Troglodytes aedon</i>	Negative	–	–	Johnson et al. 2002
House wren <i>Troglodytes aedon</i>	Unrelated	Unrelated	–	LaBarbera et al. 2010
Mangrove swallow <i>Tachycineta albilinea</i>	Unrelated	–	–	Moore et al. 1999
Pied flycatchers <i>Ficedula hypoleuca</i>	Negative	–	Negative	Canal et al. 2012
Purple-crowned fairy-wren <i>Malurus coronatus</i>	–	–	Positive	Kingma et al. 2013
Red-winged blackbird <i>Agelaius phoeniceus</i>	–	Unrelated	–	Westneat and Mays 2005
Red-winged blackbird <i>Agelaius phoeniceus</i>	Unrelated	–	–	Gray 1996
Red-winged blackbird <i>Agelaius phoeniceus</i>	Unrelated	–	Unrelated	Patrick 1997
Red-winged blackbird <i>Agelaius phoeniceus</i>	Unrelated	Unrelated	–	David et al. 1998
Red-winged blackbird <i>Agelaius phoeniceus</i>	Unrelated	–	–	Weatherhead 1997
Tree swallow <i>Tachycineta bicolor</i>	Unrelated	–	–	Dunn et al. 1994
Vinous-throated parrotbill <i>Paradoxornis webbianus</i>	Unrelated	–	–	Lee et al. 2009
White-cheeked pintail <i>Anas bahamensis bahamensis</i>	Negative	–	–	Sorenson 1994
Yellow warbler <i>Dendroica petechia</i>	Unrelated	Unrelated	–	Yezerinac and Weatherhead 1997

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7 (b) Between-population

Species	Number of populations analyzed	Population-wide	References
House wren <i>Troglodytes aedon</i>	2	Unrelated	LaBarbera et al. 2010
Red-winged blackbird <i>Agelaius phoeniceus</i>	2	Unrelated	David and Elizabeth 1998

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9 (c) Among-species

Number of species analyzed	Population-wide	References
3	Negative	Birkhead and Biggins 1987
32	Positive	Stutchbury and Morton 1995
14	Unrelated	Westneat and Sherman 1997
34	Positive	Stutchbury 1998a
34	Positive	Stutchbury 1998b
Not specified	Unrelated	Weatherhead and Yezerinac 1998
2	Negative	Dunn et al. 1999
Not specified	Unrelated	Bennett and Owens 2002
34	Positive	Spottiswoode and Møller 2004
2	Positive	Stutchbury et al. 2007
18	Positive	Albrecht et al. 2007

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11 References

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13 (a) Within-population

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