**Corrections to: Cornwallis, C.K., West, S.A., Davies, K.E. & Grifin, A.S. (2010) Promiscuity and the evolutionary transition to complex societies. *Nature* 466, 969-972.**

Last updated on 5 September, 2011.

**Corrections to the dataset:**

1. Superb starling: typo in the SI that states 25% but is 9%, which was right in the analysis

2. Bicolored wren: originally 0% (99), but should be 5% (99).1

3. Purple crowned fairy wren: originally 5.8% (104), but should be 3.8% (104).1

4. Red-billed buffalo weaver: originally 68% (19), but should be 60% (25).

5. Sociable weaver: there is a reference missing. Marsden 1999 Coloniality in the Sociable Weaver *Philetairus socius*. PhD thesis.1

6. Stripe-backed wren: we previously used the number of groups (22) rather than group-years (34) as the sample size. This should be 2.9% (34).

7. White-breasted thrasher: originally 13.3 (40), but should be 12.5% (5/40).

8. White-throated magpie jay: originally 9.38 (32), but should be 32.3% (32).1

9. White-winged chough: originally 0 (11), but should be 0% (28).1

10. Masked Booby: originally 13% (13), but should be 0% (13).

11. Comb-crested jacana: originally 11.1 (9), but should be 0 (10).

12. Tibetan ground tit: originally 37.66 (77), but should be 23.38 (77).

13. Smith’s Longspur: originally reported EPP 77.4 (31), but should be EGP 3.22 (31).

1Gratefully brought to our attention by Miya Warrington & Simon Griffith.

**Re-analysis with corrected dataset:**

1. Difference in rates of promiscuity rates between cooperative and noncooperative species

*Reported in paper:*

Bayesian phylogenetic mixed model (BPMM): cooperative: Nspecies = 35, parameter estimate (*β*) = 0.05, credible interval (CI) = 0.02 to 0.17; non- cooperative: Nspecies = 232, *β* = 0.15, CI = 0.05 to 0.30; P = 0.004.

*Re-analysis:*

BPMM: cooperative: Nspecies = 35, parameter estimate (*β*) = 0.05, credible interval (CI) = 0.02 to 0.18; non- cooperative: Nspecies = 232, *β* = 0.14, CI = 0.06 to 0.30; P = 0.008.

2. Phylogenetic correlation between cooperative breeding and promiscuity

*Reported in paper:*

BPMM: r= -0.63 (phylogenetic correlation), CI = -0.86 to -0.33, P=0.001.

*Re-analysis:*

BPMM: r= -0.62 (phylogenetic correlation), CI = -0.85 to -0.28, P=0.002.

3. Relationship between % of nests with helpers in the population and promiscuity

*Reported in paper:*

BPMM: Nspecies = 30, *β* = -0.15, CI = -0.29 to -0.02; P = 0.01.

*Re-analysis:*

BPMM: Nspecies = 30, *β* = -0.19, CI = -0.35 to -0.06; P = 0.001.

4. Relationship between kin discrimination and promiscuity2

*Reported in paper:*

BPMM: Nspecies = 15, *β* = -0.31, CI = -0.67 to 0.01; P = 0.03.

*Re-analysis:*

BPMM: Nspecies = 15, *β* = -0.29, CI = -0.65 to -0.004; P = 0.02.