

APPENDIX

Appendix A: Raw data.

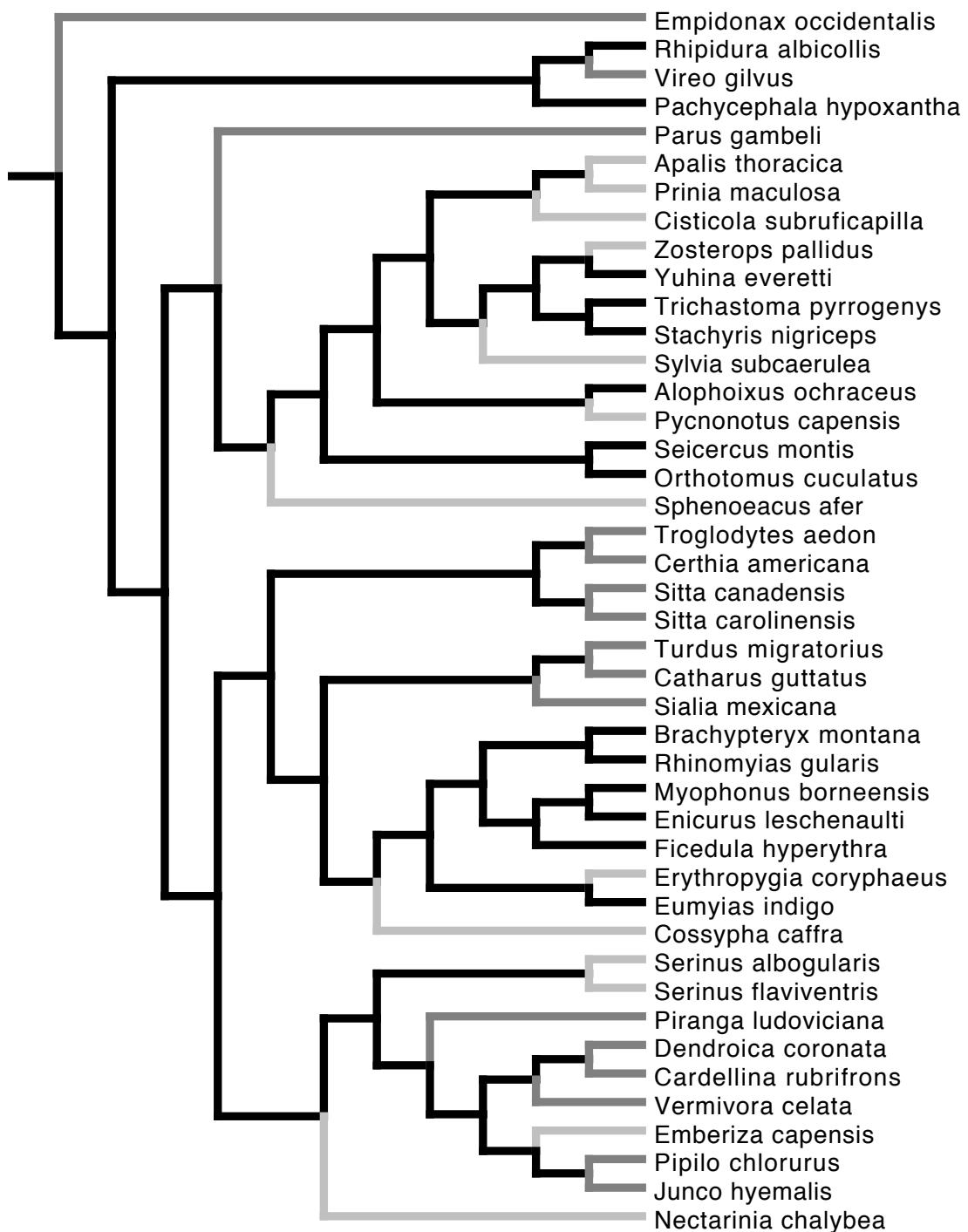
List reporting parameter estimates, standard errors (SE), and sample sizes (N = number of individuals; Np = number of nests used to calculate predation rate) of body mass and metabolic rate for each of the 43 nestling species studied at our three sites (AZ=Arizona, ZA=South Africa, MY=Malaysia).

Species	Mass (g)	SE	Metabolic rate (VO_2 (mL h^{-1}))	SE	N	Site	Np
<i>Empidonax occidentalis</i>	10.53	0.227	0.700	0.031	11	AZ	1384
<i>Vireo gilvus</i>	9.93	0.347	0.807	0.010	6	AZ	666
<i>Sialia mexicana</i>	22.42	0.571	1.309	0.034	11	AZ	469
<i>Catharus guttatus</i>	20.76	0.504	1.279	0.053	10	AZ	1415
<i>Turdus migratorius</i>	47.99	1.899	2.570	0.125	10	AZ	1361
<i>Sitta canadensis</i>	9.39	0.157	0.727	0.030	11	AZ	903
<i>Sitta carolinensis</i>	17.53	0.374	1.039	0.045	10	AZ	340
<i>Certhia americana</i>	6.86	0.162	0.568	0.020	10	AZ	521
<i>Troglodytes aedon</i>	9.62	0.231	0.615	0.034	13	AZ	2214
<i>Poecile gambeli</i>	9.74	0.265	0.677	0.050	12	AZ	1334
<i>Junco hyemalis</i>	15.32	0.263	0.962	0.025	10	AZ	2473
<i>Pipilo chlorurus</i>	19.80	0.547	1.224	0.122	9	AZ	558
<i>Oreothlypis celata</i>	7.79	0.166	0.663	0.020	10	AZ	1228
<i>Setophaga auduboni</i>	10.12	0.337	0.834	0.052	8	AZ	473
<i>Cardellina rubrifrons</i>	8.48	0.182	0.721	0.039	10	AZ	1320
<i>Piranga ludoviciana</i>	19.11	1.106	1.424	0.042	6	AZ	391
<i>Pachycephala hypoxantha</i>	15.50	0.631	0.912	0.043	7	MY	354
<i>Rhipidura albicollis</i>	9.15	0.216	0.681	0.025	9	MY	247
<i>Myophonus borneensis</i>	84.94	5.939	2.977	0.189	7	MY	117
<i>Brachypteryx montana</i>	16.47	0.491	0.810	0.028	10	MY	317
<i>Vauriella gularis</i>	22.77	0.877	1.306	0.043	9	MY	124
<i>Ficedula hyperythra</i>	8.41	0.266	0.624	0.018	10	MY	523
<i>Eumyias indigo</i>	15.03	0.103	0.877	0.038	3	MY	194
<i>Enicurus leschenaulti</i>	25.36	1.407	1.166	0.026	4	MY	84
<i>Allophoxus ochraceus</i>	22.69	1.132	1.325	0.054	4	MY	38
<i>Phyllergates cuculatus</i>	6.10	0.289	0.448	0.022	5	MY	204
<i>Seicercus montis</i>	6.39	0.128	0.469	0.017	7	MY	330
<i>Pellorneum pyrrogenys</i>	11.40	0.654	0.769	0.029	10	MY	137
<i>Stachyris nigriceps</i>	12.19	0.262	0.893	0.034	13	MY	347
<i>Yuhina everetti</i>	8.69	0.317	0.539	0.018	13	MY	845
<i>Dessonornis caffra</i>	20.12	0.530	1.436	0.031	8	ZA	518
<i>Tychadeon coryphaeus</i>	16.17	0.846	0.941	0.028	9	ZA	561
<i>Pycnonotus capensis</i>	19.94	0.780	1.597	0.071	11	ZA	397

<i>Cisticola subruficapilla</i>	7.41	0.394	0.676	0.052	4	ZA	480
<i>Prinia maculosa</i>	7.23	0.102	0.618	0.014	12	ZA	1520
<i>Apalis thoracica</i>	8.91	0.269	0.723	0.026	10	ZA	432
<i>Zosterops capensis</i>	7.22	0.395	0.665	0.041	8	ZA	339
<i>Sphenoeacus afer</i>	17.28	0.775	1.392	0.077	4	ZA	139
<i>Curruca subcaeruleum</i>	8.93	0.232	0.779	0.056	2	ZA	258
<i>Anthobaphes chalybeus</i>	6.24	0.225	0.511	0.018	9	ZA	623
<i>Crithagra flaviventris</i>	11.19	0.514	1.103	0.064	8	ZA	831
<i>Crithagra albogularis</i>	18.46	1.161	1.833	0.031	3	ZA	131
<i>Emberiza capensis</i>	13.28	0.691	1.367	0.064	5	ZA	181

Appendix B: Phylogenetic Tree

Majority rules consensus tree based on 1000 trees from birdtree.org (Jetz et al., 2012) showing the phylogenetic associations among the 43 species studied. Branches are color coded as follow: Dark gray=Arizona, Light grey=South Africa, Black=Malaysia.



References

Jetz, W., Thomas, G., Joy, J., Hartmann, K., Mooers, A. (2012) The global diversity of birds in space and time. *Nature* **491**, 444-448.

Appendix C. R codes for the linear mixed models tested in the study

```
##metabolic estimates

mod=lmer(logpostnatalmetabolism@39C~species+(1|nestidentity)
, data=data, REML=FALSE)

##phylogenetic tree

library(caper)

tree_1<-read.nexus("consensus")

##phylogenetic correlation structure

chdat=comparative.data(data=data, phy=tree_1,
names.col="species")

##run models

mod1=pgls(logpostnatalmetabolism@39C~Predationrate+Adultmort
ality+growthrate+LogMASS, chdat,lambda="ML")

#####
mod2=pgls(growthrate~logpostnatalmetabolism@39C+Predationrat
e+Adultmortality+LogMASS, chdat,lambda="ML")

#####
```