

The influence of roost type and diet on energy expenditure in bats

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Supplemental Table S1. Slopes of the relationship between physiological variables and body mass for the 43 species of bats used in this study, using conventional least squares regression. C_{\min} = minimum conductance; C_{\max} = maximum conductance; TRP = area of the thermoregulatory polygon; T_{bk} = breakpoint temperature; a_1 = intercept of the regression line between metabolic rate and ambient temperature below T_{bk} ; b_2 = slope of the regression line between metabolic rate and ambient temperature above T_{bk} ; MMSs = “Manmade structures”; RCs = “Rock crevices”; TCHTs = “Tree cavities and hollow trees”; TFB = “Tree foliage and bark”; * $p < 0.05$.

C_{\min} [W/(°C·g)]

	Buildings	Caves	MMSs	RCs	TCHTs	TFB	All
Frugivorous							0.00076*
Omnivorous							0.00042*
Insectivorous	0.00059						0.00055
Carnivorous							0.00054*
Sanguinivorous							0.00174
All	0.00088*	0.00036*	0.00033*	0.00063*	0.00057*	0.00047	0.00396*

C_{\max} [W/(°C·g)]

	Buildings	Caves	MMSs	RCs	TCHTs	TFB	All
Frugivorous							0.0146*
Omnivorous							0.0026
Insectivorous	0.0032*						0.0147*
Carnivorous							-0.0074*
Sanguinivorous							0.1043*
All	0.0132*	-0.0003	0.0128	0.0216*	0.0467*	0.0131*	0.0116*

TRP [(W·°C)/g]

	Buildings	Caves	MMSs	RCs	TCHTs	TFB	All
Frugivorous							0.1030
Omnivorous							1.0281*
Insectivorous	0.4462*						0.8766*
Carnivorous							0.3503
Sanguinivorous							-1.8320
All	0.4142*	0.4909*	-0.0045	0.8753*	1.0227*	1.0204*	0.3619*

T_{bk} (1/g)

	Buildings	Caves	MMSs	RCs	TCHTs	TFB	All
Frugivorous							0.0186
Omnivorous							0.0599
Insectivorous	0.2807*						-0.0012
Carnivorous							-0.0182
Sanguinivorous							0.0284
All	0.3308*	-0.0611*	0.0223	-0.3987*	0.0123	0.0680*	0.01085

a_1 [W/(°C·g)]

	Buildings	Caves	MMSs	RCs	TCHTs	TFB	All
Frugivorous							0.00102*
Omnivorous							0.00069*
Insectivorous	0.00014						0.00068*
Carnivorous							0.00035*
Sanguinivorous							0.00064*
All	0.00016	0.00054*	0.00018	0.00138*	0.00080*	0.00062*	0.00076*

b₂ [W/(°C·g)]

	Buildings	Caves	MMSs	RCs	TCHTs	TFB	All
Frugivorous							0.00305*
Omnivorous							0.00017
Insectivorous	-0.00071						0.00034
Carnivorous							0.00081*
Sanguinivorous							0.00024
All	-0.00052	0.00009	0.00236	0.00091*	-0.00015	0.00038	0.00182

Supplemental Table S2. Slopes of the relationship between physiological variables and body mass for the 43 species of bats used in this study, using phylogenetic independent contrasts. C_{\min} = minimum conductance; C_{\max} = maximum conductance; TRP = area of the thermoregulatory polygon; T_{bk} = breakpoint temperature; a_1 = intercept of the regression line between metabolic rate and ambient temperature below T_{bk} ; b_2 = slope of the regression line between metabolic rate and ambient temperature above T_{bk} ; MMSs = “Manmade structures”; RCs = “Rock crevices”; TCHTs = “Tree cavities and hollow trees”; TFB = “Tree foliage and bark”.

C_{\min} [W/(°C·g)]

	Caves	TCHTs	TFB	All
Frugivorous			0.00001	0.0006*
Omnivorous				0.0012*
Insectivorous	0.0006*	-0.0008*		0.0005*
All	0.0006*	0.00001	-0.00023	0.00046*

C_{\max} [W/(°C·g)]

	Caves	TCHTs	TFB	All
Frugivorous			0.0287*	0.0133
Omnivorous				-0.0134*
Insectivorous	0.0132*	0.0066		0.0145*
All	0.0013	-0.0167*	0.03025*	0.0064*

TRP (W·°C)

	Caves	TCHTs	TFB	All
Frugivorous			2.0784*	1.8800*
Omnivorous				0.4862*
Insectivorous	0.1555*	1.7567*		1.5946*
All	0.241*	0.921*	1.9572*	0.5038*

T_{bk} (1/g)

	Caves	TCHTs	TFB	All
Frugivorous			0.5369*	0.0692
Omnivorous				-0.2206*
Insectivorous	0.00337	0.0407*		0.0306
All	0.0110	-0.1306*	0.2554*	0.00854

a₁ [W/(°C·g)]

	Caves	TCHTs	TFB	All
Frugivorous			-0.00010	0.00060*
Omnivorous				0.00080*
Insectivorous	0.0006*	0.0005*		0.00060*
All	0.0008*	0.00090*	0.00007	0.00065*

b₂ [W/(°C·g)]

	Caves	TCHTs	TFB	All
Frugivorous			0.0026*	-0.0017*
Omnivorous				-0.00220*
Insectivorous	0.0026*	-0.0016*		0.0021*
All	0.0009	-0.0028*	0.0033*	0.00048