

Table S.1. Summary of model selection statistics for linear mixed effects analysis of the relationship between 24 h T_b and the explanatory variables feed-day, maximum black globe temperature and sex. Models were ranked according to the Akaike Information Criterion for small samples (AICc). The number of parameters (K), the log likelihood (LogLik) and the AICc differences (Δi) are included.

Dependent variable	Model	Rank	K	logLik	AICc	Δi	wj
24 h maximum T_b	feed_day + sex	1	5	-826.13	1662.34	0	0.366
	feed_day * sex	2	6	-825.66	1663.43	1.087	0.213
	feed_day + sex + max_globe_temp	3	6	-826.1	1664.31	1.966	0.137
	sex * max_globe_temp + feed_day	4	7	-825.63	1665.4	3.058	0.079
	feed_day * sex + max_globe_temp	5	7	-825.63	1665.4	3.063	0.079
	feed_day * max_globe_temp + sex	6	7	-826.03	1666.2	3.857	0.053
	feed_day	7	4	-829.48	1667.01	4.673	0.035
	feed_day * sex * max_globe_temp	8	10	-824.09	1668.45	6.11	0.017
	feed_day + max_globe_temp	9	5	-829.39	1668.86	6.514	0.014
	feed_day * max_globe_temp	10	6	-829.34	1670.78	8.435	0.005
	sex	11	4	-834.97	1678	15.656	0
	sex + max_globe_temp	12	5	-834.96	1679.99	17.653	0
	sex * max_globe_temp	13	6	-834.43	1680.97	18.624	0
	max_globe_temp	14	4	-838.6	1685.24	22.902	0
24 h mean T_b	feed_day * sex + mean_globe_temp	1	8	-131.25	278.67	0	0.643
	feed_day * sex * mean_globe_temp	2	11	-129.09	280.49	1.823	0.258
	mean_globe_temp * feed_day + sex	3	8	-134.28	284.73	6.061	0.031
	mean_globe_temp * sex + feed_day	4	8	-134.4	284.98	6.315	0.027
	feed_day + sex + mean_globe_temp	5	7	-135.46	285.05	6.386	0.026
	mean_globe_temp * feed_day	6	7	-136.66	287.45	8.784	0.008
	feed_day + mean_globe_temp	7	6	-137.89	287.88	9.211	0.006
	feed_day * sex	8	7	-140.56	295.25	16.584	0
	feed_day + sex	9	6	-145.17	302.43	23.765	0
	feed_day	10	5	-147.58	305.24	26.571	0
	sex + mean_globe_temp	11	6	-154.51	321.12	42.454	0
	mean_globe_temp * sex	12	7	-153.7	321.54	42.875	0
	mean_globe_temp	13	5	-157.19	324.46	45.792	0
	sex	14	5	-164.55	339.17	60.499	0