Model selection tables

LCC_both seasons (n = 167)

	df	logLik	AICc	ΔAICc	weight
2+4+5+8+10	8	-527.16	1071.23	0.00	0.19
1+2+4+5+8+10	9	-526.25	1071.64	0.41	0.15
2+4+5+6+8+10	9	-526.85	1072.86	1.63	0.08
(Null)	3	-620.57	1247.29	176.06	0.00

Rectal temperature_both seasons (n = 196)

	df	logLik	AICc	ΔAICc	weight
1+2+4+5+6+7+8+11	11	-90.50	204.43	0.00	0.05
1+2+3+4+5+6+7+8+11	12	-89.83	205.36	0.93	0.03
1+2+4+5+6+7+8	10	-92.20	205.58	1.16	0.03
1+2+4+5+6+7+11	10	-92.37	205.93	1.50	0.02
1+2+4+5+6+7	9	-93.60	206.17	1.75	0.02
1+2+4+5+7+8	9	-93.61	206.19	1.76	0.02
1+2+3+4+5+6+7+11	11	-91.39	206.21	1.78	0.02
1+2+4+5+7	8	-94.80	206.37	1.94	0.02
(Null)	3	-123.19	252.50	48.07	0.00

Metanephrine_both seasons (n = 83)

	df	logLik	AICc	ΔAICc	weight
2+4+5+6+8+11	9	94.41	-168.35	0.00	0.17
1+2+4+5+6+8+11	10	95.33	-167.60	0.75	0.12
2+4+5+6+8+10+11	10	94.73	-166.41	1.94	0.06
(Null)	3	54.76	-103.21	65.14	0.00

Normetanephrine_both seasons (n = 83)

	df	logLik	AICc	ΔAICc	weight
1+2+3+4+5+7+8	10	-6.23	35.52	0.00	0.10
1+2+3+4+5+7+10	10	-6.53	36.12	0.59	0.07
1+2+4+5+7+8	9	-8.10	36.66	1.13	0.05
1+2+3+4+5+7+8+9	11	-5.63	36.97	1.45	0.05
2+4+5+8	7	-10.85	37.19	1.67	0.04
(Null)	3	-40.91	88.12	52.60	0.00

Cortisol_both seasons (n = 83)

	df	logLik	AICc	ΔAICc	weight
1+4	5	-446.97	904.72	0.00	0.07
1+3+4	6	-446.12	905.35	0.63	0.05
1	4	-448.49	905.50	0.78	0.05
(Null)	3	-451.99	910.28	5.57	0.00

Cortisone_both seasons (n = 83)

	df	logLik	AICc	ΔAICc	weight
4+5+6+11	7	-18.86	53.22	0.00	0.14
2+4+5+6+11	8	-18.26	54.47	1.26	0.08
2+4+5+6+8+11	9	-17.04	54.54	1.32	0.07
2+4+5+6+10+11	9	-17.22	54.91	1.69	0.06
1+4+5+6+11	8	-18.58	55.10	1.88	0.06
(Null)	3	-36.58	79.46	26.25	0.00

Cortisol/Cortisone Ratio (n = 83)

	df	logLik	AICc	ΔAICc	weight
2+3+4+5+8	8	-171.90	361.74	0.00	0.07
2+3+4+5+6+8	9	-171.24	362.94	1.20	0.04
1+2+3+4+5+8	9	-171.41	363.29	1.55	0.03
2+3+4+5+8+10	9	-171.55	363.57	1.83	0.03
1+3	5	-176.42	363.63	1.88	0.03
(Null)	3	-180.25	366.79	5.05	0.01

Corticosterone_both seasons (n = 83)

	df	logLik	AICc	ΔAICc	weight
4+5	5	-126.77	264.33	0.00	0.06
2+4	5	-127.05	264.89	0.56	0.04
4	4	-128.21	264.94	0.61	0.04
1+4	5	-127.20	265.18	0.85	0.04
3+4+5	6	-126.17	265.44	1.11	0.03
1	4	-128.66	265.83	1.50	0.03
5	4	-128.79	266.09	1.76	0.02
2+4+5	6	-126.50	266.11	1.79	0.02
(Null)	3	-130.18	266.67	2.34	0.02

11-deoxycortisol_both seasons (n = 83)

	df	logLik	AICc	ΔAICc	weight
2+3+4+5+6+8+11	10	-157.52	338.10	0.00	0.10
2+4+5+6+8+11	9	-159.08	338.63	0.52	0.08
4+5+6+11	7	-161.93	339.36	1.26	0.05
(Null)	3	-175.22	356.75	18.65	0.00

17α-hydroxy progesterone_both seasons (n = 83)

	df	logLik	AICc	ΔAICc	weight
4+5+6	6	-98.36	209.82	0.00	0.05
2+4+5+6+10+11	9	-95.16	210.78	0.96	0.03
4+5+6+11	7	-97.69	210.87	1.05	0.03
5+6	5	-100.08	210.95	1.13	0.03
2+4+5+6	7	-97.76	211.02	1.20	0.03
1+4+5+6	7	-97.79	211.08	1.26	0.03
3+4+5+6	7	-97.97	211.44	1.62	0.02
2+4+5+6+8+11	9	-95.53	211.53	1.71	0.02
2+4+5+6+11	8	-96.91	211.76	1.94	0.02
(Null)	3	-113.98	234.27	24.45	0.00

Deoxycorticosterone (n = 83)

	df	logLik	AICc	ΔAICc	weight
1+2+3+4+5+6+8+11	11	-97.04	219.80	1.26	0.05
3+4+5+6+10+11	9	-99.68	219.83	1.29	0.05
4+5+6+11	7	-102.43	220.36	1.81	0.04
3+4+5+6+11	8	-101.21	220.37	1.83	0.04
2+4+5+6+8+11	9	-100.01	220.48	1.94	0.04
(Null)	3	-113.99	234.29	15.75	0.00

Estimates and confidence intervals (CI) from best model

LCC_both seasons (n = 167)

	estimate	lower 95%-CI	upper 95%-CI
Intercept	46.168	43.122	49.215
season_winter	-13.519	-16.979	-10.060
no.handlings	1.313	0.887	1.740
dur.gathering	-0.129	-0.212	-0.046
season_winter : no. of handlings	**-1.654**	**-2.373**	**-0.934**
season_winter : gathering duration	**0.612**	**0.232**	**0.992**

R^2_m = 0.60; R^2_c = 0.72

Rectal temperature_both seasons (n = 196)

	estimate	lower 95%-CI	upper 95%-CI
Intercept	40.619	39.242	41.996
season_winter	-0.074	-0.362	0.213
no. of handlings	**-0.084**	**-0.121**	**-0.048**
gathering duration	0.005	-0.001	0.011
handling duration	-0.002	-0.054	0.051
total duration	-0.001	-0.001	0.000
bodymass	-0.009	-0.026	0.008
season_winter : no. of handlings	0.016	-0.030	0.062
season_winter : handling duration	-0.008	-0.062	0.046

R^2_m = 0.18; R^2_c = 0.47

Metanephrine_both seasons (n = 83)

	estimate	lower 95%-CI	upper 95%-CI
Intercept	0.437	0.363	0.511
season_winter	0.008	-0.089	0.105
no. of handlings	**-0.016**	**-0.024**	**-0.008**
gathering duration	-0.006	-0.008	-0.004
total duration	0.000	0.000	0.001
season_winter : gathering duration	**0.014**	**0.007**	**0.021**
season_winter : total duration	**-0.001**	**-0.001**	**0.000**

R^2_m = 0.46; R^2_c = 0.72

Normetanephrine_both seasons (n = 83)

	estimate	lower 95%-CI	upper 95%-CI
Intercept	0.633	-0.878	2.144
season_winter	3.003	1.559	4.448
no. of handlings	**0.033**	**0.005**	**0.061**
gathering duration	0.013	0.007	0.019
handling duration	0.036	-0.002	0.074
bodymass	-0.010	-0.029	0.010
season_winter : gathering duration	**-0.037**	**-0.059**	**-0.015**
season_winter : bodymass	**-0.021**	**-0.038**	**-0.004**

R^2_m = 0.39; R^2_c = 0.80

Cortisol_both seasons (n = 83)

	estimate	lower 95%-CI	upper 95%-CI
Intercept	3.512	-118.769	125.793
no. of handlings	-3.140	-6.731	0.450
bodymass	**1.703**	**0.228**	**3.178**

R^2_m = 0.11; R^2_c = 0.29

Cortisone_both seasons (n = 83)

	estimate	lower 95%-CI	upper 95%-CI
Intercept	2.412	2.212	2.613
season_winter	**0.508**	**0.231**	**0.784**
no. of handlings	-0.052	-0.074	-0.030
total duration	**0.0017**	**0.0005**	**0.0029**
season_winter : total duration	**-0.004**	**-0.006**	**-0.002**

R^2_m = 0.32; R^2_c = 0.38

Cortisol/Cortisone Ratio (n = 83)

	estimate	lower 95%-CI	upper 95%-CI
Intercept	6.003	4.113	7.893
season_winter	-2.264	-4.562	0.034
no. of handlings	**-0.225**	**-0.429**	**-0.020**
gathering duration	-0.063	-0.112	-0.013
handling duration	**0.323**	**0.030**	**0.616**
season_winter : gathering duration	**0.259**	**0.083**	**0.435**

R^2_m = 0.16; R^2_c = 0.30

Corticosterone_both seasons (n = 83)

	estimate	lower 95%-CI	upper 95%-CI
Intercept	3.006	2.455	3.556
season_winter	0.384	-0.071	0.839
no. of handlings	**-0.074**	**-0.147**	**-0.001**

R^2_m = 0.06; R^2_c = 0.29

11-deoxycortisol_both seasons (n = 83)

	estimate	lower 95%-CI	upper 95%-CI
Intercept	3.818	2.184	5.452
season_winter	-1.831	-3.957	0.295
no. of handlings	**-0.366**	**-0.554**	**-0.179**
gathering duration	-0.047	-0.091	-0.003
handling duration	0.213	-0.035	0.460
total duration	0.011	0.004	0.018
season_winter : gathering duration	**0.196**	**0.039**	**0.353**
season_winter : total duration	**-0.015**	**-0.024**	**-0.005**

R^2_m = 0.27; R^2_c = 0.49

17α-hydroxy progesterone_both seasons (n = 83)

	estimate	lower 95%-CI	upper 95%-CI
Intercept	-0.440	-0.945	0.065
season_winter	0.822	0.518	1.127
no. of handlings	-0.048	-0.098	0.002
total duration	**0.003**	**0.0004**	**0.005**

R^2_m = 0.21; R^2_c = 0.57

Deoxycorticosterone (n = 83)

	estimate	lower 95%-CI	upper 95%-CI
Intercept	-0.460	-1.237	0.317
season_winter	-0.670	-1.619	0.279
no. of handlings	-0.144	-0.228	-0.060
gathering duration	-0.016	-0.036	0.003
handling duration	0.112	0.000	0.225
total duration	0.006	0.003	0.009
season_winter : gathering duration	**0.091**	**0.021**	**0.161**
season_winter : total duration	**-0.007**	**-0.011**	**-0.003**

R^2_m = 0.20; R^2_c = 0.60

Estimates and confidence intervals (CI) from best model without common intercept

LCC_both seasons (n = 167)

	estimate	lower 95%-CI	upper 95%-CI
seasonsummer	46.168	43.122	49.215
seasonwinter	32.649	29.541	35.756
seasonsummer:no.handlings	**1.313**	**0.887**	**1.740**
seasonwinter:no.handlings	-0.340	-0.920	0.239
seasonsummer:dur.gathering	**-0.129**	**-0.212**	**-0.046**
seasonwinter:dur.gathering	**0.483**	**0.113**	**0.854**

Rectal temperature_both seasons (n = 196)

	estimate	lower 95%-CI	upper 95%-CI
season_summer	40.619	39.242	41.996
season_winter	40.544	39.027	42.061
gathering duration	0.005	-0.001	0.011
total duration	-0.001	-0.001	0.000
bodymass	-0.009	-0.026	0.008
season_summer : no. of handlings	-0.084	**-0.121**	**-0.048**
season_winter : no. of handlings	-0.068	**-0.100**	**-0.037**
season_summer : handling duration	-0.002	-0.054	0.051
season_winter : handling duration	-0.009	-0.022	0.003

Metanephrine_both seasons (n = 83)

	estimate	lower 95%-CI	upper 95%-CI
season_summer	0.437	0.363	0.511
season_winter	0.445	0.371	0.518
no. of handlings	-0.016	-0.024	-0.008
season_summer : gathering duration	**-0.006**	**-0.008**	**-0.004**
season_winter : gathering duration	**0.009**	**0.003**	**0.015**
season_summer : total duration	**0.000**	**0.000**	**0.001**
season_winter : total duration	0.000	0.000	0.000

Normetanephrine_both seasons (n = 83)

	estimate	lower 95%-CI	upper 95%-CI
season_summer	0.633	-0.878	2.144
season_winter	3.636	1.963	5.309
no. of handlings	0.033	0.005	0.061
handling duration	0.036	-0.002	0.074
season_summer : gathering duration	**0.013**	**0.007**	**0.019**
season_winter : gathering duration	-0.024	-0.044	-0.004
season_summer : bodymass	-0.010	-0.029	0.010
season_winter : bodymass	**-0.031**	**-0.051**	**-0.012**

Cortisol_both seasons (n = 83)

	estimate	lower 95%-CI	upper 95%-CI
no. of handlings	-3.109	-6.504	0.287
bodymass	1.745	1.470	2.020

Cortisone_both seasons (n = 83)

	estimate	lower 95%-CI	upper 95%-CI
season_summer	2.412	2.212	2.613
season_winter	2.920	2.695	3.144
no. of handlings	-0.052	-0.074	-0.030
season_summer : total duration	**0.0017**	**0.0005**	**0.0029**
season_winter : total duration	**-0.002**	**-0.003**	**-0.001**

Cortisol/Cortisone Ratio (n = 83)

	estimate	lower 95%-CI	upper 95%-CI
season_summer	6.003	4.113	7.893
season_winter	3.739	2.149	5.329
no. of handlings	-0.225	-0.429	-0.020
handling duration	0.323	0.030	0.616
season_summer : gathering duration	**-0.063**	**-0.112**	**-0.013**
season_winter : gathering duration	**0.196**	**0.039**	**0.353**

Corticosterone_both seasons (n = 83)

	estimate	lower 95%-CI	upper 95%-CI
season_summer	3.006	2.455	3.556
season_winter	3.390	2.840	3.939
no. of handlings	-0.074	-0.147	-0.001

11-deoxycortisol_both seasons (n = 83)

	estimate	lower 95%-CI	upper 95%-CI
season_summer	3.818	2.184	5.452
season_winter	1.987	0.352	3.622
no. of handlings	-0.366	-0.554	-0.179
handling duration	0.213	-0.035	0.460
season_summer : gathering duration	**-0.047**	**-0.091**	**-0.003**
season_winter : gathering duration	**0.149**	**0.013**	**0.285**
season_summer : total duration	**0.011**	**0.004**	**0.018**
season_winter : total duration	-0.003	-0.010	0.003

17α-hydroxy progesterone_both seasons (n = 83)

	estimate	lower 95%-CI	upper 95%-CI
season_summer	-0.440	-0.945	0.065
season_winter	0.382	-0.138	0.902
no. of handlings	-0.048	-0.098	0.002
total duration	0.003	0.0004	0.005

Deoxycorticosterone (n = 83)

	estimate	lower 95%-CI	upper 95%-CI
season_summer	-0.460	-1.237	0.317
season_winter	-1.130	-1.907	-0.353
no. of handlings	-0.144	-0.228	-0.060
handling duration	0.112	0.000	0.225
season_summer : gathering duration	**-0.016**	**-0.036**	**0.003**
season_winter : gathering duration	**0.075**	**0.014**	**0.135**
season_summer : total duration	**0.006**	**0.003**	**0.009**
season_winter : total duration	-0.001	-0.004	0.001

Legend

1 bodymass
2 gathering duration
3 handling duration
4 no. of handlings
5 season
6 total duration
7 season : bodymass
8 season : gathering duration
9 season : handling duration
10 season : no. of handlings
11 season : total duration