Appendix S1: Data on mass, FMR, diet, and environmental conditions for free-living bird and mammal populations

Species	Mass (g)	FMR (kJ day^{-1})	log mcFMR (kJ day^{-1}g$^{-3/4}$)	Diet*	Latitude†	Longitude†	Temperature (°C)	NPP (t C ha^{-1}yr^{-1})	Day Length (hr)	Source
BIRDS										
Archilochus alexandri	3.7	29.1	1.04	N	31.83	-109	23.2	0.85	13.9	108, 117
Calypte anna	4.5	31.8	1.01	N	33.5	-117.5	20.2	1.10	12.3	108, 118
Thalurania colombica	4.9	37.9	1.06	N	10.43	-84	24.0		12.6	108, 155
Auriparus flaviceps	6.6	30	0.86	C	10.43	-84	24.0		12.6	108, 155
Chalybura urochrysia	7.2	57.9	1.12	N	10.43	-84	24.0		12.6	108, 155
Malurus cyaneus	8.3	34.2	0.84	C	-34.78	138.9	21.9	1.90	13.2	108, 153
Lampornis clemenciae	8.8	81.7	1.20	N	31.83	-109	23.2	0.85	13.9	108, 117
Diomedea exulans	9.4	49.9	0.97	C	-46	52	9.6		15.2	131
Nectarinia violacea	9.5	66.2	1.09	N	43	-91	21.9	6.20	14.4	108, 160
Parus ater	9.5	47.4	0.94	C	59.9	17.6	-3.3	3.46	5.7	108, 84
Acanthorhynchus tenuirostris	9.7	53	0.98	N	-34.78	138.9	20.9	1.90	12.7	108, 154
Troglodytes aedon	10.6	60.8	1.01	C	-25	20	14.9	1.22	10.6	108, 35
Parus cristatus	11.1	40.6	0.82	C	59.9	17.6	-3.3	3.46	5.7	108, 84
Parus montanus	11.3	41.2	0.83	C	59.9	17.6	-3.3	3.46	5.7	108, 84
Parus caeruleus	11.5	64	1.01	C	51.75	-1	13.4	3.93	16.0	108, 138
Parus montanus	11.5	47.1	0.88	C	67	21	-11.3	2.81	3.1	17
Ficedula hypoleuca	12	55.3	0.93	C	40.9	-4	17.1	3.33	14.9	89
Eremiornis carteri	12	51.5	0.90	C	-20.77	115	25.8			108, 3
Ficedula hypoleuca	12.6	71	1.02	C	40.8	-4	17.1	3.33	14.9	108, 85
Parus cinctus	12.8	51.4	0.88	C	67	21	-11.3	2.81	3.1	108, 17
Ficedula hypoleuca	13.7	64.5	0.96	C	56	-4	14.2	3.12	17.3	138
Hirundo tahitica	14.1	76.6	1.02	C	3.12	101.7	26.8	15.39	12.2	14
Riparia riparia	14.3	81.7	1.05	C	56	-4	12.9	3.12	17.3	108, 157
Muscicapa striata	14.4	52	0.85	C	56	-4	14.2	3.12	17.3	108, 12
Phylidonyris pyrrhoptera	14.6	75.9	1.01	N	-34.78	138.9	20.9	1.90	12.7	108, 154
Hirundo tahitica	14.7	53.2	0.85	C	3	101.7	26.9	15.39	12.2	138

Species	Mass (g)	FMR (kJ day^{-1})	log mcFMR (kJ day^{-1}g$^{-3/4}$)	Diet*	Latitude†	Longitude†	Temperature (°C)	NPP (t C ha^{-1}yr^{-1})	Day Length (hr)	Source
Ficedula albicollis	15.9	78.6	0.99	C	57.17	18	10.8	3.93	17.1	108, 87
Passerculus sandwichensis	17	67.7	0.91	O	34.12	-119	14.4		13.3	108, 167
Hirundo rustica	17.2	87.5	1.01	C	38.83	-6.98	21.3	2.11	14.7	108, 28
Phylidonyris novaehollandiae	17.3	77.6	0.96	N	-34.78	138.9	20.9	1.90	12.7	108, 154
Parus major	17.4	72	0.93	O	40.9	-4	17.1	3.33	14.9	126
Parus major	17.7	103.2	1.08	O	65	25.5	11.7	3.03	21.0	127
Parus major	17.7	97.9	1.05	O	53.3	6	16.1	5.61	16.7	126
Parus major	17.7	95.1	1.04	O	51.97	5.92	14.6	5.49	16.4	108, 142
Parus major	17.8	103.2	1.08	O	65	25.5	11.7	3.03	21.0	126
Delichon urbica	17.8	80.8	0.97	C	56.5	-4	10.2	3.12	17.4	108, 61
Junco hyemalis	17.8	70.5	0.91	O	31.92	-109	4.4	0.85	9.9	108, 156
Erithacus rubecula	18.7	71.3	0.90	C	56	-4	10.8	3.12	16.8	108, 138
Hirundo rustica	18.7	109.6	1.09	C	56.13	-3.9	11.8	3.12	17.3	108, 150
Passerculus sandwichensis	18.7	73.8	0.91	O	30.52	-116	16.8	0.45	13.5	108, 165
Parus major	18.9	56	0.79	O	56	-4	3.0	3.12	7.3	12
Delichon urbica	19	80.2	0.94	C	56	-4	12.9	3.12	17.3	108, 157
Passerculus sandwichensis	19.1	80.3	0.94	O	34.12	-119	16.0		13.8	108, 166
Delichon urbica	19.5	79.3	0.93	C	56.5	-4	11.5	3.12	16.9	108, 15
Erithacus rubecula	19.5	63	0.83	C	56	-4	4.6	3.12	7.3	12, 66
Junco phaeonotus	19.5	70.7	0.88	O	31.9	-109	19.4	0.85	14.1	108, 156
Junco phaeonotus	19.9	70.5	0.87	O	31.9	-109	5.3	0.85	10.1	108, 156
Hirundo rustica	20.4	104	1.03	C	56	-4	12.9	3.12	17.3	108, 157
Passerculus sandwichensis	21	156	1.20	O	44.6	-66.75	15.7	4.19	15.1	108, 158
Prunella modularis	21.2	86	0.94	C	56	-4	3.0	3.12	7.3	108, 12
Junco hyemalis	21.4	82.7	0.92	O	31.92	-109	22.4	0.85	13.9	108, 156
Tachycineta bicolor	22.4	118	1.06	C	44.6	-66.75	15.4	4.19	15.3	108, 159
Phainopepla nitens	22.7	79.1	0.88	O	33.75	116.4	20.2	10.36	13.7	108, 152
Cormobates leucophaeus	23.7	81.4	0.88	C	-34.78	138.9	21.9	1.90	13.2	108, 153

Species	Mass (g)	FMR (kJ day^{-1})	log mcFMR (kJ day^{-1}g$^{-3/4}$)	Diet*	Latitude†	Longitude†	Temperature (°C)	NPP (t C ha^{-1}yr^{-1})	Day Length (hr)	Source
Oenanthe oenanthe	24.3	95.3	0.94	C	56.12	-4	13.0	3.12	17.3	108, 137
Oenanthe oenanthe	24.3	87.4	0.90	C	56.57	16.6	12.7		17.4	108, 83
Pyrrhula pyrrhula	25.1	88	0.89	H	51	-1.5	4.0	4.22	8.2	108, 12
Philetairus socius	25.5	48.7	0.63	O	-24	17.5	14.0	1.08	13.3	108, 164
Mirafra erythrochlamys	27.4	92.5	0.89	O	-23.55	15	15.9		11.8	161
Sialia mexicana	27.4	95	0.90	C	33.75	-116.9	12.7	0.97	14.1	108, 82
Melopsittacus undulatus	27.9	59.1	0.69	O	-21.67	115.2	28.9	0.68	13.3	108, 170
Merops viridis	33.8	77.4	0.74	C	3.12	101.7	26.7	15.39	12.2	14
Merops viridis	34.3	85.3	0.78	C	3	101.7	26.9	15.39	12.2	138
Oceanites oceanus	42.3	119	0.86	C	-64.44	-64.03	1.0		17.6	108, 111
Oceanodroma leucorhoa	44.8	87.1	0.70	C	44.6	-66.75	15.9		15.1	108, 122
Calidris alba	48.8	100	0.73	C	8.73	-80.2	26.6		11.5	108, 18
Progne subis	49	163	0.94	C	47	-94.5	18.6	5.15	15.7	108, 143
Phalaenoptilus nuttallii	51.2	55.3	0.46	C	49.3	-119.5	13.6	2.37	15.7	108, 140
Actitis hypoleucos	51.6	146	0.88	C	56	-4	11.5		16.8	108, 138
Calidris alba	53.4	135	0.83	C	29.5	-93	10.1	10.30	10.3	108, 18
Calidris alba	53.7	129	0.81	C	-12.55	-76.5	22.0		12.5	108, 18
Neophema petrophila	62.8	106	0.68	O	-30	115	24.5	0.79	13.4	108, 170
Cinclus cinclus	63.7	206	0.96	C	56	-4	4.6	3.12	6.7	108, 13
Calidris alba	64.2	200	0.95	C	39.92	-74.2	-2.0		9.2	108, 18
Cinclus cinclus	64.3	84.5	0.57	C	56	-3.7	13.6	3.12	16.0	108, 11
Turdoides squamiceps	72.5	120.6	0.69	O	30.75	35.25	23.9		10.0	4
Charadrius hiaticula	74.8	302	1.07	C	55.4	-0.5	11.5		16.7	108, 138
Ceryle rudis	76	210	0.91	C	0	35	19.3	8.81	12.0	108, 121
Sturnus vulgaris	78.7	269	1.01	O	39.9	-75.5	16.4	6.83	14.2	108, 123
Aethia pusilla	80.3	349.8	1.12	C	62	-171	7.7		15.8	112
Melanerpes formicivorous	82	195	0.85	O	36	-121.5	12.6		13.4	108, 151
Aethia pusilla	83.5	357.9	1.11	C	56.58	-169.58	7.4		16.9	108, 124

Species	Mass (g)	FMR (kJ day^{-1})	log mcFMR (kJ day^{-1}g$^{-3/4}$)	Diet*	Latitude†	Longitude†	Temperature (°C)	NPP (t C ha^{-1}yr^{-1})	Day Length (hr)	Source
Geophaps plumifera	87	76	0.43	H	-21	118	26.5	1.29	13.3	108, 163
Turdus merula	96	179	0.77	C	56	-4	3.0	3.12	7.3	108, 12
Sterna paradisaea	101	335	1.02	C	55.37	-2.42	14.6		16.7	108, 144
Arenaria interpres	109	363.8	1.03	C	68.9	-79	2.9		24.0	116
Pelecanoides georgicus	109	464	1.14	C	56.58	-169.58	7.4		16.9	108, 124
Sterna hirundo	127	343	0.96	C	53.75	8	14.7		16.8	108, 73
Pelecanoides urinatrix	137	557	1.14	C	56.58	-169.58	7.4		16.9	108, 124
Barnardius zonarius	145	189	0.66	O	-29.53	115.77	25.3	0.69	13.9	108, 170
Callipepla gambelii	145	90.8	0.34	O	33.72	-116.4	32.0	10.36	12.9	108, 51
Pachyptila desolata	149	391	0.96	C	-54	-38	4.7		13.5	108, 139
Alle alle	164	696	1.18	C	77	-15	3.1		24.0	108, 43
Ptychoramphus aleuticus	174	413	0.94	C	37.07	-123	14.4		14.5	108, 63
Sterna fuscata	187	241	0.68	C	24	-166	23.1		12.9	108, 39
Ammoperdix heyi	190	148	0.46	O	34.78	30.9	20.3	1.85		108, 68
Anous stolidus	195	352	0.83	C	24	-166	24.8		13.5	108, 36
Falco tinnunculus	217	338	0.78	C	63	23	14.1	3.59	19.7	108, 67
Falco tinnunculus	220	343	0.78	C	53.35	6.2	9.6	5.61		108, 79
Cacatua roseicapilla	307	349	0.68	O	-29.53	115.77	25.3	0.69	13.9	108, 170
Rissa tridactyla	364.6	823.8	0.99	C	78.9	11.9	5.5		24.0	41
Phaethon lepturus	370	777	0.96	C	18	-65	27.1		13.1	108, 113
Cepphus grylle	380	860	1.00	C	79	12	7.0		24.0	81
Puffinus pacificus	384	613.7	0.85	C	24	-166	24.8		13.5	108, 37
Rissa tridactyla	386	795	0.96	C	76.5	25	4.6		24.0	108, 42
Alectoris chukar	395	260	0.47	O	34.78	30.9	20.2	1.85		108, 68
Rissa tridactyla	404.2	904.1	1.00	C	70.37	31	6.8		24.0	141
Uria lomvia	834	1480	0.98	C	63.4	-171.82	7.4		17.6	108, 65
Eudyptula minor	1036.8	1207	0.82	C	-40.4	144.5	9.9		9.4	108, 44
Eudyptula minor	1053	1163.7	0.80	C	-40.4	144.5	11.0		11.6	108, 44

Species	Mass (g)	FMR (kJ day^{-1})	log mcFMR (kJ day^{-1}g$^{-3/4}$)	Diet*	Latitude†	Longitude†	Temperature (°C)	NPP (t C ha^{-1}yr^{-1})	Day Length (hr)	Source
Sula sula	1070	1220	0.81	C	16.75	-169.5	25.5		12.4	108, 6
Eudyptula minor	1074.6	1860.3	1.00	C	-40.4	144.5	14.8		14.9	108, 44
Eudyptula minor	1089	916	0.68	C	-38.52	145.13	12.1		11.6	108, 23
Eudyptula minor	1121.8	1061.6	0.74	C	-40.4	144.5	13.4		14.2	108, 44
Eudyptula minor	1368.4	657	0.47	C	-40.4	144.5	15.6		12.3	108, 44
Phalacrocorax carbo sinensis	2122	2094	0.83	C	47.9	12.25	-3.6	3.51	10.8	71
Centrocercus urophasianus	2500	1540	0.64	H	37.6	-118.7	4.9	2.07	12.4	108, 146
Morus capensis	2580	3380	0.97	C	-32	18.2	23.3		14.1	108, 1
Diomedea immutabilis	3070	1330	0.51	C	-46.87	37.85	5.0		9.9	108, 115
Spheniscus demersus	3170	1950	0.66	C	-33	16.9	14.6		10.7	108, 109
Sula bassanus	3210	4870	1.06	C	49.9	-53.25	12.8		13.6	108, 9
Diomedea chrysostoma	3710	2390	0.70	C	-54	-38	4.8		16.3	108, 25
Pygoscelis antarctica	3806	4720	0.99	C	-63	-60.7	0.8		19.6	108, 87
Pygoscelis adeliae	3810	3896	0.90	C	-64.75	-64	1.4		19.4	108, 105
Macronectes giganteus	3890	4330	0.94	C	-64.75	-64	1.1		19.4	108, 110
Pygoscelis adeliae	3966.7	3825.5	0.88	C	-64.75	-64	1.0		19.4	108, 19
Pygoscelis adeliae	4038.9	4186.3	0.92	C	-63.4	-56.98	0.1		19.8	108, 29
Eudyptes chrysolophus	4270	2950	0.75	C	-54	-38	4.1		16.3	108, 30
Pygoscelis papua	6093.5	3682	0.73	C	-54	-38	4.1		16.3	30
Pygoscelis papua	6200	4156.2	0.77	C	-53	74	1.8			108, 45
Diomedea exulans	8420	3350	0.58	C	-46.87	37.85				108, 2
Aptenodytes patagonicus	12900	7410	0.79	C	-54.45	36.25	7.3		14.5	108, 74
Struthio camelus	88300	18000	0.55	O	-24	-15.9	22.2		10.8	108, 169

Species	Mass (g)	FMR (kJ day^{-1})	log mcFMR (kJ day^{-1}g$^{-3/4}$)	Diet*	Latitude†	Longitude†	Temperature (°C)	NPP (t C ha^{-1}yr^{-1})	Day Length (hr)	Source
MAMMALS										
Saccopteryx bilineata	7.9	16.2	0.54	C	10.42	-84	19.3	7.60	11.4	147
Plecotus auritus	8.5	27.6	0.74	C	57	-3	5.5	3.04		108, 135
Myotis lucifugus	9	29.9	0.76	C	42.88	-71.95	17.9	6.33	15.1	108, 77
Gerbillus henleyi	9.3	26.5	0.70	H	30.58	34.75	17.7			108, 33
Tarsipes rostratus	9.9	34.4	0.79	N	-30.17	119.52	11.0	0.80	10.9	108, 102
Anoura caudifer	11.5	51.9	0.92	N	10	-67	23.9	10.59	12.2	108, 145
Macrotus californicus	13	21.5	0.50	C	34	-116	23.1	0.19	10.0	108, 7
Peromyscus crinitus	13.4	39.3	0.75	O	42	-71	-0.3	6.95	9.3	108, 91
Mus domesticus	15.1	47.1	0.79	O	-34.53	138.43	17.0	1.99		108, 95
Cleithrionomys rutilus	16	57.6	0.86	H	64.85	-147.72	-3.0	1.82		108, 64
Antechinus stuartii	16.2	45.4	0.75	C	-36	149	17.4		14.1	108, 56
Sminthopsis crassicaudata	16.6	68.6	0.92	C	-37.9	144.67	14.2	5.36	13.3	108, 96
Syconycteris australis	17.4	76.9	0.96	H	-29.22	153.35	16.0	9.71	10.1	134, 47
Peromyscus maniculatus	17.6	68.4	0.90	O	37	-118	4.5	0.36	12.3	108, 62
Perognathus formosus	17.9	45.2	0.72	H	36.5	-116	18.0	0.20		108, 92
Peromyscus maniculatus	18.4	46.3	0.72	O	37	-118	15.5	0.36	11.7	108, 62
Mus musculus	19.3	65.1	0.85	H	-46.9	37.75	7.0		9.9	134, 125
Peromyscus leucopus	19.4	36.6	0.60	O	36	-84	11.8	7.46		108, 119
Peromyscus leucopus	19.4	45	0.69	O	43.5	-90	18.7	6.68	13.9	108, 93
Apodemus sylvaticus	20.5	67.9	0.85	O	57.5	-2.5	7.4	3.04		21
Eremitalpa namibensis	20.7	12.5	0.11	C	-23	15	17.3		13.0	108, 130
Eptesicus fuscus	20.8	43.6	0.65	C	42	-71	18.1	6.95	15.0	108, 78
Antechinus stuartii	22.8	54.1	0.71	C	-36	149	5.9		9.8	108, 34
Gerbillus allenbyi	22.8	35.6	0.53	H	31.02	34.75	19.4			108, 56
Microtus agrestis	26.5	72.7	0.79	H	53.15	6.55	15.0	4.39	14.7	108, 80
Antechinus stuartii	27.8	86.5	0.85	C	-36	149	16.4		14.3	108, 56
Dipodomys merriami	28.2	57.8	0.67	H	42	-71	16.0	6.95	11.0	108, 90

Species	Mass (g)	FMR (kJ day^{-1})	log mcFMR (kJ day^{-1}g$^{-3/4}$)	Diet*	Latitude†	Longitude†	Temperature (°C)	NPP (t C ha^{-1}yr^{-1})	Day Length (hr)	Source
Dipodomys merriami	31.7	23.2	0.24	H	42	-71	30.0	6.95	13.8	108, 90
Gerbillus pyramidum	31.8	45.2	0.53	H	31.02	34.75	19.4			108, 34
Dipodomys merriami	32.4	40.5	0.47	H	42	-71	26.0	6.95	12.4	108, 90
Antechinus stuartii	33	86.4	0.80	C	-36	149	11.3			108, 56
Phascogale calura	33.5	61.9	0.65	C	-32.75	117.33	16.4	1.20		108, 55
Dipodomys merriami	34.3	41.3	0.46	H	42	-71	12.0	6.95	9.7	108, 90
Dipodomys merriami	35.9	56.1	0.58	H	42	-71	12.5	6.95		108, 90
Microtus pennsylvanicus	36.9	115	0.89	H	46.87	-71.22	18.7		14.8	108, 8
Dipodomys merriami	37.4	61.8	0.61	H	42	-71	1.0	6.95	9.0	108, 90
Dipodomys merriami	37.9	68	0.65	H	42	-71	2.5	6.95	10.4	108, 90
Acomys cahirinus	38.3	51.8	0.53	O	31.47	35.38	17.6		12.3	108, 32
Antechinus stuartii	39.5	100.5	0.81	C	-36	149	5.4		10.6	108, 56
Dipodomys merriami	39.5	102	0.81	H	42	-71	4.0	6.95	11.7	108, 90
Dipodomys merriami	39.7	40.7	0.41	H	42	-71	4.0	6.95	9.3	108, 90
Sekeetamys calurus	41.2	44	0.43	O	31.47	35.38	17.6		12.3	108, 32
Dipodomys merriami	41.6	69.8	0.63	H	42	-71	17.0	6.95	13.1	108, 90
Microgale dobsoni	42.6	77.1	0.66	C	-18.15	47.27	17.6	8.74		108, 136
Microgale talazaci	42.8	66.5	0.60	C	-18.47	48.47	19.9	9.34		108, 136
Pseudomys nanus	44.4	44.6	0.41	H	-20.75	115.33	25.9			134, 10
Acomys russatus	45	47.8	0.44	O	31.47	35.38	17.6		12.3	108, 32
Zyzomys argurus	46.8	15.6	-0.06	H	-20.75	115.33	25.9			134, 10
Lemmus trimucronatus	55.2	201	1.00	H	71.3	-156.67	4.2	0.42	24.0	108, 114
Dipodomys microps	57.1	84.5	0.61	O	42	-71	14.2	6.95		108, 90
Praomys natalensis	57.3	86.6	0.62	O	-29.58	30.42	18.6	8.54	13.9	108, 57
Antechinus swainsonii	62.6	150	0.83	C	-36.5	148.4	8.9			108, 58
Microcebus murinus	64.5	112.1	0.69	O	-20	44.6	22.4			129
Meriones crassus	69.2	65	0.43	H	30.58	34.75	17.7			108, 33
Phyllostomus hastatus	80.8	146	0.73	C	10.5	-61.25	30.0		11.4	108, 76

Species	Mass (g)	FMR (kJ day^{-1})	log mcFMR (kJ day^{-1}g$^{-3/4}$)	Diet*	Latitude†	Longitude†	Temperature (°C)	NPP (t C ha^{-1}yr^{-1})	Day Length (hr)	Source
Arvicola terrestris	85.8	119	0.63	H	47	7	9.8	3.09		108, 59
Ammospermophilus leucurus	96.1	94.2	0.49	O	35	-117	21.8	0.92	13.8	108, 69
Ammospermophilus leucurus	96.1	82.6	0.43	O	35	-117	6.9	0.92	9.9	108, 70
Tamias striatus	96.3	143	0.67	O	36	-84	11.8	7.46		108, 119
Thomomys bottae	104	130	0.60	H	33.75	-116.75	14.9	0.97		108, 48
Petaurus breviceps	124	173	0.67	O	-37	142	9.7		12.3	108, 106
Gymnobelideus leadbeateri	125	226	0.78	O	-37.57	145.88	10.5			108, 133
Psammomys obesus	170	165	0.54	H	30.87	34.78	17.5			108, 31
Spermophilus saturatus	214	226	0.61	H	47.82	-120.67	13.0	2.83	15.5	108, 72
Tamiasciurus hudsonicus	322	347	0.66	O	56.57	-3.67	5.7	2.85		16
Isoodon auratus	333	285	0.56	O	-20.75	115.33	26.4			108, 10
Sciurus carolinensis	588	574	0.68	O	56.57	-3.67	5.7	2.85		16
Bettongia lesueur	720	442	0.50	H	-20.75	115.33	25.5		13.1	98
Bassariscus astutus	752	472	0.52	C	34	-112	26.7	1.13	13.3	108, 20
Suricata suricatta	761.8	549	0.58	C	-25.9	21.8	23.4	1.92	13.5	128
Potorous tridactylus	831	590	0.58	H	-38	143	11.1	4.32	11.6	108, 149
Potorous tridactylus	839	463	0.47	H	-38	143	17.2	4.32	14.4	108, 149
Macrotis lagotis	848	533.8	0.53	O	-24.22	140.57	30.9	0.46	13.3	49
Macrotis lagotis	928	655.3	0.59	O	-24.22	140.57	16.2	0.46	10.6	49
Vulpes cana	972	642	0.57	C	31.47	35.38	18.6			108, 46
Petauroides volans	995	520	0.47	H	-25.47	152.63	18.2	11.83	10.5	108, 40
Pseudocheirus peregrinus	1000	615	0.54	H	-40.1	148.02	13.3	4.70		108, 94
Dasyurus viverrinus	1029	793	0.64	C	-42	147	8.7	3.63		134, 53
Trichosurus arnhemensis	1103	324	0.23	H	-20.75	115.33	25.5		13.1	98
Isoodon obesulus	1230	644	0.49	O	-32	116	17.9	1.25	11.2	108, 106
Vulpes macrotis	1480	1180	0.69	C	34	-115.5	18.7	0.19		108, 50
Setonix brachyurus	1507	486	0.30	H	-32	116	22.5	1.25	13.9	108, 97
Lepus californicus	1800	1300	0.67	H	35	-114	17.8	0.48		108, 132

Species	Mass (g)	FMR (kJ day^{-1})	log mcFMR (kJ day^{-1}g$^{-3/4}$)	Diet*	Latitude†	Longitude†	Temperature (°C)	NPP (t C ha^{-1}yr^{-1})	Day Length (hr)	Source
Vulpes velox	1990	1488	0.70	C	37	-105	-2.6	3.86	9.7	108, 27
Vulpes velox	2200	2079	0.81	C	37	-105	14.2	3.86	13.5	108, 27
Petrogale lateralis	2205	610	0.28	H	-20.75	115.33	25.5		13.1	98
Setonix brachyurus	2472	662	0.28	H	-32	116	22.5	1.25	13.9	108, 97
Lagorchestes conspicillatus	2529	680	0.28	H	-20.75	115.33	25.5		13.0	98
Arctocephalus gazella	2660	1634	0.64	C	-54	-38.03	4.8	0.84	16.3	26
Aepyrpimnus rufescens	2860	1430	0.56	H	-28.88	152.38	18.3	7.36		108, 148
Tachyglosssus aculeatus	2860	875	0.35	C	-36	137	15.2	2.23		108, 54
Bradypus variegatus	4150	545	0.02	H	9.15	-79.85	25.9	12.89	11.6	108, 104
Thylogale billiardieri	5980	1630	0.38	H	-37	145	18.4	4.72	14.5	108, 97
Aloutta palliata	7330	2580	0.51	H	9.15	-79.85	25.9	12.89	11.6	108, 103
Phascolarctos cinereus	7400	1476.1	0.27	H	-24	148	27.0	6.70	13.5	108, 38
Proteles cristatus	7768	2891.2	0.54	C	-28.83	24.83	12.2	3.60	13.8	108, 162
Phascolarctos cinereus	7800	1782.9	0.33	H	-24	148	14.0	6.70	10.6	108, 38
Proteles cristatus	8543	1844.8	0.32	C	-28.83	24.83	27.2	3.60	10.2	108, 162
Phascolarctos cinereus	9300	2040	0.33	H	-38.2	146	9.3	4.85	10.5	101
Macropus robustus	12912	1572	0.11	H	-20.75	115.33	25.5		13.0	98
Lyacon pictus	25170	15300	0.88	C	-25	32	19.5	7.92	10.6	108, 52
Arctocephalus gazella	34900	22700	0.95	C	-54	-38.03	4.8	0.84	16.3	108, 22
Arctocephalus gazella	36800	19363.3	0.86	C	-54	-38.03	4.8	0.84	16.3	108, 5
Arctocephalus galapagoensis	37400	4780	0.25	C	-0.47	-91.62	21.8	11.59	12.0	108, 26
Odocoileus hemionus	39100	18000	0.81	H	38.55	-121.73	22.3	1.41		108, 97
Antidorcas marsupialis	43300	24100	0.90	H	-26	21	19.8	1.47		108, 100
Oryx leucoryx	81500	11076	0.36	H	28.25	41.67	32.5	0.08	13.6	168
Mirounga angustirostris	86750	30804	0.78	C	37.57	-122.33	10.0	2.23	9.7	107, 75
Oryx leucoryx	89000	22081	0.63	H	28.25	41.67	22.8	0.08	12.7	168
Phoca vitulina	99000	52500	0.97	C	59.13	-3.08	11.8	3.04	18.1	108, 120
Cervus elaphus	107000	25000	0.63	H	57.15	-2.08	13.3	3.04	15.1	60
Phocarctos hookeri	111400	52648.5	0.94	C	-50.5	166.28	12.5		15.1	24

* Diet: H- herbivore (includes granivores and frugivores), O- omnivore, C- carnivore (includes insectivores), N- nectarivore

† Latitude: positive values refer to ºN, negative to ºS; Longitude: positive values refer to ºE, negative to ºW

Sources:

1. Adams N., Abrams R., Siegfried W., Nagy K. & Kaplan I. (1991) Energy expenditure and food consumption by breeding Cape gannets *Morus capensis*. *Marine Ecology Progress Series*, 70, 1-9
2. Adams N., Brown C. & Nagy K. (1986) Energy expenditure of free ranging Wandering albatrosses *Diomedea exulans*. *Physiological Zoology*, 59, 583-591
3. Ambrose S., Bradshaw S., Withers P. & Murphy D. (1996) Water and energy balance of captive and free-ranging Spinifexbirds (Eremiornis carteri) North (Aves:Sylviidae) on Barrow Island, Western Australia. *Australian Journal of Zoology*, 44, 107-117
4. Anava A., Kam M., Shkolnik A. & Degen A. (2000) Seasonal field metabolic rate and dietary intake in Arabian Babblers (Turdoides squamiceps) inhabiting extreme deserts. *Functional Ecology*, 14, 607-613
5. Arnould J., Boyd I. & Speakman J. (1996) The relationship between foraging behaviour and energy expenditure in Antarctic fur seals. *Journal of Zoology*, 239, 769-782
6. Ballance L. (1995) Flight energetics of free-ranging red-footed boobies (*Sula sula*). *Physiological Zoology*, 68, 887-914
7. Bell G., Bartholomew G. & Nagy K. (1986) The roles of energetics, water economy, foraging behavior, and geothermal refugia in the distribution of the bat, *Macrotus californicus*. *Journal of Comparative Physiology B- Biochemical Systemic and Environmental Physiology*, 156, 441-450
8. Berteaux D., Thomas D., Bergeron J. & Lapierre H. (1996) Repeatability of daily field metabolic rate in female Meadow Voles (Microtus pennsylvanicus). *Functional Ecology*, 10, 751-759
9. Birt-Friesen V., Montevecchi W., Cairns D. & Macko S. (1989) Activity-specific metabolic rates of free-living northern gannets and other seabirds. *Ecology*, 70, 357-367
10. Bradshaw S., Morris K., Dickman C., Withers P. & Murphy D. (1994) Field metabolism and turnover in the golden bandicoot (*Isoodon auratus*) and other small mammals from Barrow Island, western Australia. *Australian Journal of Zoology*, 42, 29-41
11. Brown C. & Bryant D. (1996) Energy expenditure during molt in dippers (Cinclus cinclus): No evidence of elevated costs. *Physiological Zoology*, 69, 1036-1056
12. Bryant D. (1997) Energy expenditure in wild birds. *Proceedings of the Nutrition Society*, 56, 1025-1039
13. Bryant D., Hails C. & Prys-Jones R. (1985) Energy expenditure by free-living dippers (*Cinclus cinclus*) in winter. *Condor*, 87, 177-186
14. Bryant D., Hails C. & Tatner P. (1984) Reproductive energetics of 2 tropical bird species. *Auk*, 101, 25-37
15. Bryant D. & Westerterp K. (1980) The energy budget of the house martin (*D*elichon urbica). *Ardea*, 68, 91-102
16. Bryce J., Speakman J., Johnson P. & Macdonald D. (2001) Competition between Eurasian red and introduced Eastern grey squirrels: the energetic significance of body-mass differences. *Proceedings of the Royal Society of London Series B- Biological Sciences*, 268, 1731-1736
17. Carlson A., Moreno J. & Alatalo R. (1993) Winter metabolism of coniferous forest tits (Paridae) under arctic conditions: a study with doubly labeled water. *Ornis Scandinavica*, 24, 161-164
18. Castro G., Myers J. & Ricklefs R. (1992) Ecology and energetics of sanderlings migrating to 4 latitudes. *Ecology*, 73, 833-844
19. Chappell M., Shoemaker V., Janes D., Maloney S. & Bucher T. (1993) Energetics of foraging in breeding Adelie penguins. *Ecology*, 74, 2450-2461
20. Chevalier C. (1989) Field energetics and water balance of desert dwelling ringtail cats, *Bassariscus astutus* (Carnivora, Procyonidae). *American Zoologist*, 29, A 8
21. Corp N., Gorman M. & Speakman J. (1999) Daily energy expenditure of free-living male Wood Mice in different habitats and seasons. *Functional Ecology*, 13, 585-593
22. Costa D., Croxall J. & Duck C. (1989) Foraging energetics of Antarctic fur seals in relation to changes in prey availability. *Ecology*, 70, 596-606
23. Costa D., Dann P. & Disher W. (1986) Energy requirements of free ranging little penguin, *Eudyptula minor*. *Comparative Biochemistry and Physiology A: Comparative Physiology*, 85, 135-138

24. Costa D. & Gales N. (2000) Foraging energetics and diving behavior of lactating New Zealand sea lions, Phocarctos hookeri. *Journal of Experimental Biology*, 203, 3655-3665
25. Costa D. & Prince P. (1987) Foraging energetics of gray headed albatrosses *Diomedea chrysostoma* at Bird Island, South Georgia. *Ibis*, 129, 149-158
26. Costa D. & Trillmich F. (1988) Mass changes and metabolism during the perinatal fast: a comparison between Antarctic (*Arctocephalus gazella*) and Galapagos fur seals (*Arctocephalus galapagoensis*). *Physiological Zoology*, 61, 160-169
27. Covell D., Miller D. & Karasov W. (1996) Cost of locomotion and daily energy expenditure by free-living swift foxes (Vulpes velox): A seasonal comparison. *Canadian Journal of Zoology*, 74, 283-290
28. Cuervo J., deLope F., Moller A. & Moreno J. (1996) Energetic cost of tail streamers in the barn swallow (Hirundo rustica). *Oecologia*, 108, 252-258
29. Culik B. & Wilson R. (1992) Field metabolic rates of instrumented Adelie penguins using double-labeled water. *Journal of Comparative Physiology B: Biochemica Systemic and Environmental Physiology*, 162, 567-573
30. Davis R., Croxall J. & O'Connell M. (1989) The reproductive energetics of Gentoo (*Pygoscelis papua*) and Macaroni (*Eudyptes chrysolophus*) penguins at South Georgia. *Journal of Animal Ecology*, 58, 59-74
31. Degen A., Hazan A., Kam M. & Nagy K. (1991) Seasonal water influx and energy expenditure of free-living fat sand rats. *Journal of mammalogy*, 72, 652-657
32. Degen A., Kam M., Hazan A. & Nagy K. (1986) Energy expenditure and water influx in 3 sympatric desert rodents. *Journal of Animal Ecology*, 55, 421-429
33. Degen A., Khokhlova I., Kam M. & Nagy K. (1997) Body size, granivory and seasonal dietary shifts in desert gerbilline rodents. *Functional Ecology*, 11, 53-59
34. Degen A., Pinshow B. & Kam M. (1992) Field metabolic rates and water influxes of 2 sympatric Gerbillidae: *Gerbillus allenbyi and G. pyramidum*. *Oecologia*, 90, 586-590
35. Dykstra C. & Karasov W. (1993) Daily energy expenditure by nestling house wrens. *Condor*, 95, 1028-1030
36. Ellis H. (1984) Energetics of free-ranging seabirds. In: *Seabird energetics* (eds. Whittow G & Rahn H), pp. 203-234. Plenum, New York, New York, USA
37. Ellis H., Pettit T. & Whittow G. (1983) Field metabolic rates and water turnover in 2 Hawaiian seabirds. *American Zoologist*, 23, 980
38. Ellis W., Melzer A., Green B., Newgrain K., Hindell M. & Carrick F. (1995) Seasonal variation in water flux, field metabolic rate and food consumption of free-ranging koalas (*Phascolarctos cinereus*). *Australian Journal of Zoology*
39. Flint E. & Nagy K. (1984) Flight energetics of free-living sooty terns. *Auk*, 101, 288-294
40. Foley W., Kehl J., Nagy K., Kaplan I. & Borsboom A. (1990) Energy and water metabolism in free-living greater gliders, *Petauroides volans*. *Australian Journal of Zoology*, 38, 1-9
41. Fyhn M., Gabrielsen G., Nordoy E., Moe B., Langseth I. & Bech C. (2001) Individual variation in field metabolic rate of kittiwakes (Rissa tridactyla) during the chick-rearing period. *Physiological and Biochemical Zoology*, 74, 343-355
42. Gabrielsen G., Mehlum F. & Nagy K. (1987) Daily energy expenditure and energy utilization of free-ranging black-legged kittiwakes. *Condor*, 89, 126-132
43. Gabrielsen G., Taylor J., Konarzewski M. & Mehlum F. (1991) Field and laboratory metabolism and thermoregulation in dovekies (*Alle alle*). *Auk*, 108, 71-78
44. Gales R. & Green B. (1990) The annual energetics cycle of little penguins (*Eudyptula minor*). *Ecology*, 71, 2297-2312
45. Gales R., Green B., Libke J., Newgrain K. & Pemberton D. (1993) Breeding energetics and food requirements of gentoo penguins (*Pygoscelis papua*) at Heard and Macquarie islands. *Journal of Zoology*, 231, 125-139
46. Geffen E., Degen A., Kam M., Hefner R. & Nagy K. (1992) Daily energy expenditure and water flux of free-living Blanfords foxes (*Vulpes cana*), a small desert carnivore. *Journal of Animal Ecology*, 61, 611-617

47. Geiser F. & Coburn D. (1999) Field metabolic rates and water uptake in the blossom-bat Syconycteris australis (Megachiroptera). *Journal of Comparative Physiology B*, 169, 133-138
48. Gettinger R. (1984) Energy and water metabolism of free-ranging pocket gophers, *Thomomys bottae*. *Ecology*, 65, 740-751
49. Gibson L. & Hume I. (2000) Seasonal field energetics and water influx rates of the greater bilby (Macrotis lagotis). *Australian Journal of Zoology*, 48, 225-239
50. Girard I. (2001) Field cost of activity in the kit fox, *Vulpes macrotis*. *Physiological and Biochemical Zoology*, 74, 191-202
51. Goldstein D. & Nagy K. (1985) Resource utilization by desert quail: time and energy, food and water. *Ecology*, 66, 378-387
52. Gorman M., Mills M., Raath J. & Speakman J. (1998) High hunting costs make African wild dogs vulnerable to kleptoparasitism by hyaenas. *Nature*, 391, 479-481
53. Green B. & Eberhard I. (1983) Water and sodium intake, and estimated food consumption, in free-living eastern quolls, *Dasyurus viverrinus*. *Australian Journal of Zoology*, 31, 871-880
54. Green B., Griffiths M. & Newgrain K. (1992) Seasonal patterns in water, sodium and energy turnover in free-living echidnas, *Tachyglossus aculeatus* (Mammalia, Monotremata). *Journal of Zoology*, 227, 351-365
55. Green B., King D. & Bradley A. (1989) Water and energy metabolism and estimated food consumption rates of free-living wambengers, *Phascogale calura* (Marsupialia, Dasyuridae). *Australian Wildlife Research*, 16, 501-507
56. Green B., Newgrain K., Catling P. & Turner G. (1991) Patterns of prey consumption and energy use in a small carnivorous marsupial, *Antechinus stuartii*. *Australian Journal of Zoology*, 39, 539-547
57. Green B. & Rowerowe D. (1987) Water and energy metabolism in free-living multi-mammate mice, *Praomys natalensis,* during summer. *South African Journal of Zoology*, 22, 14-17
58. Green K. & Crowley H. (1989) Energetics and behavior of active subnivean insectivores *Antechinus swainsonii* and *Antechinus stuartii* (Marsupialia: Dasyuridae) in the Snowy Mountains (New South Wales, Australia). *Australian Wildlife Research*, 16, 509-516
59. Grenot C., Pascal M., Buscarlet L., Francaz J. & Sellami M. (1984) Water and energy balance in the water vole (*Arvicola terrestris* Sherman) in the laboratory and in the field (Haut-Doubs, France). *Comparative Biochemistry and Physiology A*, 78, 185-196
60. Haggarty P., Robinson J., Ashton J., Milne E., Adam C., Kyle C., Christie S. & Midwood A. (1998) Estimation of energy expenditure in free-living red deer (Cervus elaphus) with the doubly-labeled water method. *British Journal of Nutrition*, 80, 263-272
61. Hails C. & Bryant D. (1979) Reproductive energetics of a free-living bird. *Journal of Animal Ecology*, 48, 471-482
62. Hayes J. (1989) Field and maximal metabolic rates of deer mice (*Peromyscus maniculatus*) at low and high altitudes. *Physiological Zoology*, 62, 732-744
63. Hodum P., Sydeman W., Visser G. & Weathers W. (1998) Energy expenditure and food requirement of Cassin's Auklets provisioning nestlings. *Condor*, 100, 546-550
64. Holleman D., White R. & Feist D. (1982) Seasonal energy and water metabolism in free-living Alaskan voles. *Journal of Mammalogy*, 63, 293-296
65. Johnson S. & West G. (1975) Growth and development of heat regulation in nestlings, and metabolism of adult common and thick-billed murres. *Ornis Scandinavica*, 6, 109-115
66. Johnstone I. (1994) Space use by passerine birds: a study of territory economics in robins *Erithacus rubecula* and dippers *Cinclus cinclus*. In. University of Stirling
67. Jonsson K., Korpimaki E., Pen I. & Tolonen P. (1996) Daily energy expenditure and short-term reproductive costs in free-ranging Eurasian Kestrels (Falco tinnunculus). *Functional Ecology*, 10, 475-482
68. Kam M., Degen A. & Nagy K. (1987) Seasonal energy, water, and food consumption of Negev chukars and sand partridges. *Ecology*, 68, 1029-1037
69. Karasov W. (1981) Daily energy expenditure and the cost of activity in a free-living mammal. *Oecologia*, 51, 253-259

70. Karasov W. (1983) Wintertime energy conservation by huddling in antelope ground squirrels (*Ammosphermophilus leucurus*). *Journal of Mammalogy*, 64, 341-345
71. Keller T. & Visser G. (1999) Daily energy expenditure of great cormorants *Phalacrocorax carbo sinensis* wintering at Lake Chiemsee, Southern Germany. *Ardea*, 87, 61-69
72. Kenagy G., Sharbaugh S. & Nagy K. (1989) Annual cycle of energy and time expenditure in a golden mantled ground squirrel population. *Oecologia*, 78, 269-282
73. Klaassen M., Becker P. & Wagener M. (1992) Transmitter loads do not affect the daily energy expenditure of nesting common terns. *Journal of Field Ornithology*, 63, 181-185
74. Kooyman G., Cherel Y., Lemaho Y., Croxall J., Thorson P. & Ridoux V. (1992) Diving behavior and energetics during foraging cycles in king penguins. *Ecological Monographs*, 62, 143-163
75. Kretzmann M., Costa D. & LeBoeuf B. (1993) Maternal energy investment in elephant seal pups: evidence for sexual equality. *American Naturalist*, 141, 466-480
76. Kunz T., Robson S. & Nagy K. (1998) Economy of harem maintenance in the greater spear-nosed bat, Phyllostomus hastatus. *Journal of Mammalogy*, 79, 631-642
77. Kurta A., Johnson K. & Kunz T. (1987) Oxygen consumption and body temperature of female little brown bats (*Myotis lucifugus*) under simulated roost conditions. *Physiological Zoology*, 60, 386-397
78. Kurta A., Kunz T. & Nagy K. (1990) Energetics and water flux of free-ranging big brown bats (*Eptesicus fuscus*) during pregnancy and lactation. *Journal of Mammalogy*, 71, 59-65
79. Masman D., Daan S. & Beldhuis H. (1988) Ecological energetics of the kestrel: daily energy expenditure throughout the year based on time-energy budget, food-intake and doubly labeled water methods. *Ardea*, 76, 64-81
80. Meerlo P., Bolle L., Visser G., Masman D. & Daan S. (1997) Basal metabolic rate in relation to body composition and daily energy expenditure in the field vole, Microtus agrestis. *Physiological Zoology*, 70, 362-369
81. Mehlum F., Gabrielsen G. & Nagy K. (1993) Energy expenditure by black guillemots (*Cepphus grylle*) during chick rearing. *Colonial waterbirds*, 16, 45-52
82. Mock P. (1991) Daily allocation of time and energy of western bluebirds feeding nestlings. *Condor*, 93, 598-611
83. Moreno J. (1989) Variation in daily energy expenditure in northern wheatears (*Oenanhe oenanthe*). *Auk*, 106, 18-25
84. Moreno J., Carlson A. & Alatalo R. (1988) Winter energetics of coniferous forest tits Paridae in the north: the implications of body size. *Functional Ecology*, 2, 163-170
85. Moreno J., Cowie R., Sanz J. & Williams R. (1995) Differential response by males and females to brood manipulations in the pied flycatcher: energy-expenditure and nestling diet. *Journal of Animal Ecology*, 64, 721-732
86. Moreno J., Gustafsson L., Carlson A. & Part T. (1991) The cost of incubation in relation to clutch size in the collared flycatcher *Ficedula albicollis*. *Ibis*, 133, 186-193
87. Moreno J. & Sanz J. (1994) The relationship between the energy-expenditure during incubation and clutch size in the pied flycatcher *Ficedula hypoleuca*. *Journal of Animal Ecology*, 25, 125-130
88. Moreno J. & Sanz J. (1996) Field metabolic rates of breeding chinstrap penguins (Pygoscelis antarctica) in the south Shetlands. *Physiological Zoology*, 69, 586-598
89. Moreno J., Sanz J., Merino S. & Arriero E. (2001) Daily energy expenditure and cell-mediated immunity in pied flycatchers while feeding nestlings: interaction with moult. *Oecologia*, 129, 492-497
90. Mullen R. (1971) Energy metabolism and body water turnover rates of two species of free-living kangaroo rats, *Dipodomys merriami* and *Dipodomys microps*. *Comparative Biochemistry and Physiology A: Physiology*, 39, 379-390

91. Mullen R. (1971) Energy metabolism of *Peromyscus crinitus* in its natural environment. *Journal of Mammalogy*, 52, 633-635
92. Mullen R. & Chew R. (1973) Estimating the energy metabolism of free-living *Perognathus formosus*: a comparison of direct and indirect methods. *Ecology*, 54, 633-637
93. Munger J. & Karasov W. (1994) Costs of bot fly infection in white-footed mice: energy and mass flow. *Canadian Journal of Zoology*, 72, 166-173
94. Munks S. & Green B. (1995) Energy allocation for reproduction in a marsupial arboreal folivore, the common ringtail possum (*Pseudocheirus peregrinus*). *Oecologia*, 101, 94-104
95. Mutze G., Green B. & Newgrain K. (1991) Water flux and energy use in wild house mice (*Mus domesticus*) and the impact of seasonal aridity on breeding and population levels. *Oecologia*, 88, 529-538
96. Nagy K. (1988) Seasonal patterns of water and energy balance in desert vertebrates. *Journal of Arid Environments*, 14, 201-210
97. Nagy K., Bradley A. & Morris K. (1990) Field metabolic rates, water fluxes, and feeding rates of qoikkas, *Setonix brachyurus*, and tammars, *Macropus eugenii*, in Western Austraila. *Australian Journal of Zoology*, 37, 553-560
98. Nagy K. & Bradshaw S. (2000) Scaling of energy and water fluxes in free-living arid-zone Australian marsupials. *Journal of Mammalogy*, 81, 962-970
99. Nagy K., Bradshaw S. & Clay B. (1991) Field metabolic rate, water flux, and food requirements of short-nosed bandicoots, *Isoodon obesulus* (Marsupialia, Peramelidae). *Australian Journal of Zoology*, 39, 299-305
100. Nagy K. & Knight M. (1994) Energy, water, and food use by springbok antelope (*Antidorcas marsupialis*) in the Kalahari desert. *Journal of Mammalogy*, 75, 860-872
101. Nagy K. & Martin R. (1985) Field metabolic rate, water flux, food consumption and time budget of koalas, *Phascolarctos cinereus* (Marsupialia, Phascolarctidae) in Victoria. *Australian Journal of Zoology*, 33, 655-665
102. Nagy K., Meienberger C., Bradshaw S. & Wooller R. (1995) Field metabolic rate of a small marsupial mammal, the honey possum (*Tarsipes rostratus*). *Journal of Mammalogy*, 76, 862-866
103. Nagy K. & Milton K. (1979) Energy metabolism and food consumption by wild howler monkeys (*Alouatta palliata*). *Ecology*, 60, 475-480
104. Nagy K. & Montgomery G. (1980) Field metabolic rate, water flux, and food consumption in 3-toed sloths (*Bradypus variegatus*). *Journal of Mammalogy*, 61, 465-472
105. Nagy K. & Obst B. (1992) Food and energy requirements of Adelie penguins (*Pygoscelis adeliae*) on the Antarctic peninsula. *Physiological Zoology*, 65, 1271-1284
106. Nagy K. & Suckling G. (1985) Field energetics and water balance of sugar gliders, *Petaurus breviceps* (Marsupialia, Petauridae). *Australian Journal of Zoology*, 33, 683-691
107. Nagy K.A. (1994) Field bioenergetics of mammals- what determines field metabolic rates. *Australian Journal of Zoology*, 42, 43-53
108. Nagy K.A., Girard I.A. & Brown T.K. (1999) Energetics of free-ranging mammals, reptiles, and birds. *Ann. Rev. Nutr.*, 19, 247-277
109. Nagy K.A., Siegfried W. & Wilson R. (1984) Energy utilization by free-ranging jackass penguins, *Spheniscus demersus*. *Ecolgy*, 65, 1648-1655
110. Obst B. & Nagy K. (1992) Field energy expenditures of the sothern giant petrel. *Condor*, 94, 801-810
111. Obst B., Nagy K.A. & Ricklefs R. (1987) Energy utilization by Wilson's storm-petrel (*Oceanites oceanicus*). *Physiological Zoology*, 60, 200-201
112. Obst B., Russell R., Hunt G., Eppley Z. & Harrison N. (1995) Foraging radii and energetics of least aucklets (*Aethia pusilla*) breeding on 3 Bering Sea Islands. *Physiological Zoology*, 68, 647-672
113. Pennycuick C., Schaffner F., Fuller M., Obrecht H. & Sternberg L. (1990) Foraging flights of the white-tailed tropicbird (*Phaethon lepturus*): radiotracking and doubly-labeled water. *Colonial Waterbirds*, 13, 96-102
114. Peterson R., Batzli G. & Banks E. (1976) Activity and energetics of the brown lemming in its natural habitat. *Arctic and Alpine Research*, 8, 131-138
115. Pettit T., Nagy K., Ellis H. & Whittow G. (1988) Incubation energetics of the Laysan albatross. *Oecologia*, 74, 546-550
116. Piersma T. & Morrison R. (1994) Energy expenditure and water turnover of incubating ruddy turnstones: high costs under high arctic climatic conditions. *Auk*, 111, 366-376

117. Powers D. & Conley T. (1994) Field metabolic rate and food consumption of 2 sympatric hummingbird species in southeastern Arizona. *Condor*, 96, 141-150
118. Powers D. & Nagy K. (1988) Field metabolic rate and food consumption by free-living Anna hummingbirds (*Calypte anna*). *Physiological Zoology*, 61, 500-506
119. Randolph J. (1980) Daily energy metabolism of 2 rodents (*Peromyscus leucopus and Tamias striatus*) in their natural environment. *Physiological Zoology*, 53, 70-81
120. Reilly J. & Fedak M. (1991) Rates of water turnover and energy-expenditure of free-living male common seals (*Phoca vitulina*). *Journal of Zoology*, 223, 461-468
121. Reyer H. & Westerterp K. (1985) Parental energy expenditure: a proximate cause of helper recruitment in the pied kingfisher (*Ceryle rudis*). *Behavioral Ecology and Sociobiology*, 17, 363-369
122. Ricklefs R., Roby D. & Williams J. (1986) Daily energy expenditure by adult leachs storm-petrels during the nesting cycle. *Physiological Zoology*, 59, 649-660
123. Ricklefs R. & Williams J. (1984) Daily energy expenditure and water turnover rate of adult European starlings (*Sturnus vulgaris*) during the nesting cycle. *Auk*, 101, 707-716
124. Roby D. & Ricklefs R. (1986) Energy expenditure in adult least auklets and diving petrels during the chick-rearing period. *Physiological Zoology*, 59, 661-678
125. Rowe-Rowe D.T., Green B. & Crafford J. (1989) Estimated impact of feral house mice on sub-Antarctic invertebrates at Marion Island. *Polar Biology*, 9, 457-460
126. Sanz J., Tinbergen J., Moreno J., Orell M. & Verhulst S. (2000) Latitudinal variation in parental energy expenditure during brood rearing in the great tit. *Oecologia*, 122, 149-154
127. Sanz J., Tinbergen J., Orell M. & Rytkonen S. (1998) Daily energy expenditure during brood rearing of Great Tits Parus major in northern Finland. *Ardea*, 86, 101-107
128. Scantlebury M., Russell A., McIlrath G., Speakman J. & Clutton-Brock T. (2002) The energetics of lactation in cooperatively breeding meerkats *Suricata suricatta*. *Proceedings of the Royal Society of London Series B*, 269, 2147-2153
129. Schmid J. & Speakman J. (2000) Daily energy expenditure of the grey mouse lemur (Microcebus murinus): a small primate that uses torpor. *Journal of Comparative Physiology B*, 170, 633-641
130. Seymour R., Withers P. & Weathers W. (1998) Energetics of burrowing, running, and free-living in the Namib Desert golden mole (Eremitalpa namibensis). *Journal of Zoology*, 244, 107-117
131. Shaffer S., Costa D. & Weimerskirch H. (2001) Comparison of methods for evaluating energy expenditure of incubating wandering albatrosses. *Physiological and Biochemical Zoology*, 74, 823-831
132. Shoemaker V., Nagy K. & Costa W. (1976) Energy utilization and temperature regulation by jackrabbits (*Lepus californicus*) in the Mojave Desert. *Physiological Zoology*, 49, 364-375
133. Smith A., Nagy K., Fleming M. & Green B. (1982) Energy requirements and water turnover in free-living leadbeater possums, *Gymnobelideus leadbeateri* (Marsupialia, Petauridae). *Australian Journal of Zoology*, 30, 737-749
134. Speakman J. (2000) The cost of living: Field metabolic rates of small mammals. *Advances in Ecological Research*, 30, 177-297
135. Speakman J. & Racey P. (1987) The equilibrium concentration of O-18 in body-water: implications for the accuracy of the doubly-labeled water technique and a potential new method of measuring RQ in free-living animals. *Journal of Theoretical Biology*, 127, 79-95
136. Stephenson P., Speakman J. & Racey P. (1994) Field metabolic rate in 2 species of shrew-tenrec, *Microgale dobsoni* and *M. talazaci*. *Comparative Biochemistry and Physiology A*, 107, 283-287
137. Tatner P. (1990) Energetic demands during brood rearing in the wheatear *Oenanthe oenanthe*. *Ibis*, 132, 423-435

138. Tatner P. & Bryant D. (1993) Interspecific variation in daily energy expenditure during avian incubation. *Journal of Zoology*, 231, 215-232
139. Taylor J., Place A. & Roby D. (1997) Stomach oil and reproductive energetics in Antarctic prions, *Pachyptila desolata*. *Canadian Journal of Zoology*, 75, 490-500
140. Thomas D., Brigham R. & Lapierre H. (1996) Metabolic rates and body mass changes in common poorwills (*Phalaenoptilus nuttallii*: Caprimulgidae). *Ecoscience*, 3, 70-74
141. Thomson D., Furnes R. & Monaghan P. (1998) Field metabolic rates of Kittiwakes *Rissa tridactyla* during incubation and chick rearing. *Ardea*, 86, 169-175
142. Tinbergen J. & Dietz M. (1994) Parental energy-expenditure during brood rearing in the great tit (*Parus major*) in relation to body mass, temperature, food availability and clutch size. *Functional Ecology*, 8, 563-572
143. Utter J. & LeFebvre E. (1973) Daily energy expenditure of purple martins (*Progne subis*) during the breeding season: estimates using D_2O^{18} and time budget methods. *Ecology*, 54, 797-604
144. Uttley J., Tatner P. & Monaghan P. (1994) Measuring the daily energy expenditure of free-living arctic terns (*Sterna paradisaea*). *Auk*, 111, 453-459
145. VanHelversen O. & Reyer H. (1984) Nectar intake and energy expenditure in a flower visiting bat. *Oecologia*, 63, 178-184
146. Vehrencamp S., Bradbury J. & Gibson R. (1989) The energetic cost of display in male sage grouse. *Animal Behaviour*, 38, 885-896
147. Voigt C., von Helversen O., Michener R. & Kunz T. (2001) The economics of harem maintenance in the sac-winged bat, *Saccopteryx bilineata* (Emballonuridae). *Behavioral Ecology and Sociobiology*, 50, 31-36
148. Wallis I. & Green B. (1992) Seasonal field energetics of the rufous rat-kangaroo (*Aepyprymnus rufescens*). *Australian Journal of Zoology*, 40, 279-290
149. Wallis I., Green B. & Newgrain K. (1997) Seasonal field energetics and water fluxes of the long-nosed Potoroo (*Potorous tridactylus*) in Southern Victoria. *Australian Journal of Zoology*, 45, 1-11
150. Ward S. (1996) Energy expenditure of female barn swallows *Hirundo rustica* during egg formation. *Physiological Zoology*, 69, 930-951
151. Weathers W., Koenig W. & Stanback M. (1990) Breeding energetics and thermal ecology of the acorn woodpecker in central coastal California. *Condor*, 92, 341-359
152. Weathers W. & Nagy K. (1980) Simultaneous doubly labeled water (3H18O) and time budget estimates of daily energy-expenditure in *Phainopepla nitens*. *Auk*, 97, 861-867
153. Weathers W. & Paton D. (1997) Summer field metabolic rate and water intake rate in superb fairy-wrens and a white-throated treecreeper. *Emu*, 97, 324-325
154. Weathers W., Paton D. & Seymour R. (1996) Field metabolic rate and water flux of nectarivorous honeyeaters. *Australian Journal of Zoology*, 44, 445-460
155. Weathers W. & Stiles F. (1989) Energetics and water balance in free living tropical hummingbirds. *Condor*, 91, 324-331
156. Weathers W. & Sullivan K. (1993) Seasonal patterns of time and energy allocation by birds. *Physiological Zoology*, 66, 511-536
157. Westerterp K. & Bryant D. (1984) Energetics of free existence in swallows and martins (Hirundinidae) during breeding: a comparative study using doubly labeled water. *Oecologia*, 62, 376-381
158. Williams J. (1987) Field metabolism and food consumption of savannah sparrows during the breeding season. *Auk*, 104, 277-289
159. Williams J. (1988) Field metabolism of tree swallows during the breeding season. *Auk*, 105, 706-714
160. Williams J. (1993) Energetics of incubation in free-living orange-breasted sunbirds in South Africa. *Condor*, 95, 115-126
161. Williams J. (2001) Energy expenditure and water flux of free-living Dune Larks in the Namib: a test of the reallocation hypothesis on a desert bird. *Functional Ecology*, 15, 175-185
162. Williams J., Anderson M. & Richardson P. (1997) Seasonal differences in field metabolism, water requirements, and foraging behavior of free-living aardwolves. *Ecology*, 78, 2588-2602

163. Williams J., Bradshaw D. & Schmidt L. (1995) Field metabolism and water requirements of spinifex pigeons (*Geophaps plumifera*) in western Australia. *Australian Journal of Zoology*, 43, 1-15
164. Williams J. & DuPlessis M. (1996) Field metabolism and water flux of sociable weavers *Philetairus socius* in the Kalahari Desert. *Ibis*, 138, 168-171
165. Williams J. & Dwinnel B. (1990) Field metabolism of free-living female savannah sparrows during incubation: a study using doubly labeled water. *Physiological Zoology*, 63, 353-372
166. Williams J. & Nagy K. (1984) Daily energy expenditure of savannah sparrows: comparison of time-energy budget and doubly-labeled water estimates. *Auk*, 101, 221-229
167. Williams J. & Nagy K. (1985) Daily energy expenditure by female savannah sparrows feeding nestlings. *Auk*, 102, 187-190
168. Williams J., Ostrowski S., Bedin E. & Ismail K. (2001) Seasonal variation in energy expenditure, water flux and food consumption of Arabian oryx *Oryx leucoryx*. *Journal of Experimental Biology*, 204, 2301-2311
169. Williams J., Siegfried W., Milton S., Adams N., Dean W., DuPlessis M., Jackson S. & Nagy K. (1993) Field metabolism, water requirements, and foraging behavior of wild ostriches in the Namib. *Ecology*, 74, 390-404
170. Williams J., Withers P., Bradshaw S. & Nagy K. (1991) Metabolism and water flux of captive and free-living Australian parrots. *Australian Journal of Zoology*, 39, 131-142.