

Dataset S5. Standard metabolic rates in ectothermic vertebrates

Standard metabolic rates of amphibia and reptilia were taken from White, C. R., Phillips, N. R. & Seymour, R. S. The scaling and temperature dependence of vertebrate metabolism. *Biol. Lett.* **2**, 125–127 (2006). Minimum mass-specific value for each species was taken, resulting in 158 values for 158 amphibian species (out of 682 values available in White et al. (2006)) and 156 values for 156 reptilian species (out of 483 values available in White et al. (2006)). These minimum values are presented in Table **S5a** (amphibians) and Table **S5b** (reptiles) below.

Database www.fishbase.org was searched for fish metabolism data, of which only routine and standard values obtained with non-stressed animals were considered. This yielded a total of 6,333 values of mass-specific metabolic rate for 266 species. For each species the minimum value was taken, listed below in Table **S5c**.

Notations to Tables **S5a**, **S5b**, **S5c**:

qWkg is standard (or, in some cases in fish, routine) metabolic rate in Watts per kilogram (converted from oxygen uptake rates at 1 ml O₂ = 20 J); **TC** is ambient temperature at which measurements were taken, degrees Celsius; **q25Wkg** is metabolic rate converted to 25 °C using $Q_{10} = 1.65, 2.21$ and 2.44 for fish, amphibians and reptiles, respectively (White et al. 2006), $q25Wkg = qWkg \times Q_{10}^{(25 - TC)/10}$, dimension W (kg WM)⁻¹; **Mg** is wet body mass in grams; **Log** stands for decimal logarithms of the corresponding variables.

For a discussion of the differences between standard and routine metabolic rates in aquatic versus terrestrial ectotherms see SI Methods.

Table **S5a**. Standard metabolic rates in amphibians (after White et al. 2006)

Species	q25Wkg	Logq25Wkg	Mg	LogMg	TC	qWkg
1. <i>Acris crepitans</i>	0.369	-0.433	1.59	0.201	15	0.167
2. <i>Agalychnis callidryas</i>	0.492	-0.308	5.65	0.752	20	0.331
3. <i>Ambystoma gracile</i>	0.256	-0.592	30.39	1.483	15	0.116
4. <i>Ambystoma jeffersonianum</i>	0.435	-0.362	8.92	0.950	15	0.197
5. <i>Ambystoma macrodactylum</i>	0.396	-0.402	3.414	0.533	15	0.179
6. <i>Ambystoma maculatum</i>	0.281	-0.551	15.83	1.199	15	0.127
7. <i>Ambystoma mexicanum</i>	0.105	-0.979	21.3	1.328	22	0.083
8. <i>Ambystoma opacum</i>	0.246	-0.609	4.65	0.667	14	0.103
9. <i>Ambystoma talpoideum</i>	0.981	-0.008	7	0.845	15	0.444
10. <i>Ambystoma tigrinum</i>	0.157	-0.804	10.78	1.033	15	0.071
11. <i>Amphiuma means</i>	0.068	-1.167	352	2.547	5	0.014
12. <i>Amphiuma tridactylum</i>	0.046	-1.337	652	2.814	15	0.021
13. <i>Aneides ferreus</i>	0.334	-0.476	2.73	0.436	15	0.151
14. <i>Aneides flavipunctatus</i>	0.323	-0.491	4.57	0.660	15	0.146
15. <i>Aneides hardii</i>	0.437	-0.360	0.97	-0.013	20	0.294
16. <i>Aneides lugubris</i>	0.329	-0.483	5.58	0.747	15	0.149
17. <i>Batrachoseps attenuatus</i>	0.479	-0.320	0.93	-0.032	25	0.479
18. <i>Bolitoglossa franklini</i>	0.212	-0.674	3.18	0.502	15	0.096
19. <i>Bolitoglossa morio</i>	0.261	-0.583	2.09	0.320	15	0.118
20. <i>Bolitoglossa occidentalis</i>	0.256	-0.592	0.97	-0.013	15	0.116
21. <i>Bolitoglossa subpalmata</i>	0.264	-0.578	1.63	0.212	5	0.054
22. <i>Bombina orientalis</i>	0.462	-0.335	2.6	0.415	20	0.311
23. <i>Boulengerula taitanus</i>	0.433	-0.364	5	0.699	35	0.956
24. <i>Bufo alvaris</i>	0.966	-0.015	150.8	2.178	15	0.437
25. <i>Bufo americanus</i>	0.229	-0.640	50	1.699	20	0.154
26. <i>Bufo boreas</i>	0.150	-0.824	57.8	1.762	20	0.101
27. <i>Bufo bufo</i>	0.460	-0.337	76.13	1.882	15	0.208
28. <i>Bufo calamita</i>	0.479	-0.320	8.7	0.940	20	0.322
29. <i>Bufo cognatus</i>	0.409	-0.388	40.2	1.604	25	0.409
30. <i>Bufo debilis</i>	1.571	0.196	0.66	-0.180	15	0.711
31. <i>Bufo marinus</i>	0.130	-0.886	145	2.161	15	0.059
32. <i>Bufo terrestris</i>	0.629	-0.201	19.8	1.297	25	0.629

33.	<i>Bufo viridis</i>	0.207	-0.684	35	1.544	20	0.139
34.	<i>Bufo woodhousii</i>	0.221	-0.656	56.3	1.751	25	0.221
35.	<i>Ceratophrys calcarata</i>	0.297	-0.527	55.5	1.744	25	0.297
36.	<i>Chiromantis petersi</i>	0.394	-0.405	11.2	1.049	25	0.394
37.	<i>Chiropoterotriton bromeliacia</i>	0.301	-0.521	0.59	-0.229	15	0.136
38.	<i>Colostethus inguinalis</i>	0.718	-0.144	1.57	0.196	20	0.483
39.	<i>Colostethus nubicola</i>	0.895	-0.048	0.27	-0.569	25	0.895
40.	<i>Colostethus trinitatus</i>	1.117	0.048	1	0.000	25	1.117
41.	<i>Conraua goliath</i>	0.417	-0.380	251	2.400	25	0.417
42.	<i>Crinia parinsignifera</i>	1.413	0.150	0.452	-0.345	30	2.101
43.	<i>Crinia signifera</i>	1.333	0.125	0.621	-0.207	25	1.333
44.	<i>Cryptobranchus alleganiensis</i>	0.172	-0.764	423	2.626	25	0.172
45.	<i>Cyclorana platycephala</i>	0.659	-0.181	11	1.041	15	0.298
46.	<i>Dendrobates auratus</i>	0.500	-0.301	1.77	0.248	25	0.500
47.	<i>Desmognathus fuscus</i>	0.354	-0.451	2.09	0.320	20	0.238
48.	<i>Desmognathus monticola</i>	0.351	-0.455	3.43	0.535	20	0.236
49.	<i>Desmognathus ochrophaes</i>	0.268	-0.572	1.6	0.204	17.5	0.148
50.	<i>Desmognathus quadramaculatus</i>	0.190	-0.721	23.41	1.369	5	0.039
51.	<i>Dicamptodon ensatus</i>	0.159	-0.799	101.25	2.005	15	0.072
52.	<i>Discoglossus pictus</i>	0.306	-0.514	30.7	1.487	20	0.206
53.	<i>Eleutherodactylus coqui</i>	0.340	-0.469	4.06	0.609	20	0.229
54.	<i>Eleutherodactylus portoricensis</i>	0.851	-0.070	3.7	0.568	15	0.385
55.	<i>Ensatina eschscholtzi</i>	0.374	-0.427	5.3	0.724	25	0.374
56.	<i>Eurycea bislineata</i>	0.376	-0.425	1.14	0.057	5	0.077
57.	<i>Eurycea longicauda</i>	0.393	-0.406	1.57	0.196	15	0.178
58.	<i>Eurycea multiplicata</i>	0.267	-0.573	0.71	-0.149	15	0.121
59.	<i>Eurycea nana</i>	0.476	-0.322	0.154	-0.812	25	0.476
60.	<i>Eurycea neotenes</i>	0.590	-0.229	0.243	-0.614	25	0.590
61.	<i>Eurycea pterophila?</i>	0.499	-0.302	0.196	-0.708	25	0.499
62.	<i>Gastrophryne carolinensis</i>	0.430	-0.367	1.9	0.279	20	0.289
63.	<i>Geotrypetes seraphini</i>	0.306	-0.514	1.93	0.286	20	0.206
64.	<i>Gyrinophilus danielsi</i>	0.274	-0.562	14.44	1.160	15	0.124
65.	<i>Gyrinophilus porphyricus</i>	0.178	-0.750	12.4	1.093	15.5	0.084
66.	<i>Hydromantes sp.</i>	0.471	-0.327	3.23	0.509	15	0.213
67.	<i>Hyla arborea</i>	2.922	0.466	7.78	0.891	18.5	1.745
68.	<i>Hyla arenicolor</i>	0.736	-0.133	3.37	0.528	20	0.495
69.	<i>Hyla chrysoscelis</i>	0.693	-0.159	3.9	0.591	10	0.211
70.	<i>Hyla cinerea</i>	0.567	-0.246	4.5	0.653	25	0.567
71.	<i>Hyla crepitans</i>	0.644	-0.191	9.9	0.996	25	0.644
72.	<i>Hyla crucifer</i>	0.908	-0.042	1.15	0.061	20	0.611
73.	<i>Hyla gratiosa</i>	0.384	-0.416	13.9	1.143	29	0.528
74.	<i>Hyla maxima</i>	0.528	-0.277	41.4	1.617	25	0.528
75.	<i>Hyla regilla</i>	0.299	-0.524	2.27	0.356	21	0.218
76.	<i>Hyla squirella</i>	0.783	-0.106	2.2	0.342	27	0.917
77.	<i>Hyla versicolor</i>	0.697	-0.157	8.62	0.936	19	0.433
78.	<i>Hyperolius marmoratus</i>	0.555	-0.256	1	0.000	20	0.373
79.	<i>Hyperolius parallelus</i>	0.632	-0.199	1	0.000	20	0.425
80.	<i>Hyperolius tuberilinguis</i>	0.560	-0.252	1	0.000	20	0.377
81.	<i>Hyperolius viridiflavus</i>	0.776	-0.110	0.9	-0.046	20	0.522
82.	<i>Kaloula pulchra</i>	0.214	-0.670	30.7	1.487	20	0.144
83.	<i>Kassina senegalensis</i>	0.623	-0.206	3.02	0.480	20	0.419
84.	<i>Kassina weali</i>	0.421	-0.376	6.25	0.796	20	0.283
85.	<i>Lepidobatrachus llanensis</i>	0.539	-0.268	88.5	1.947	25	0.539
86.	<i>Leptodactylus typhoniis</i>	0.639	-0.194	5.1	0.708	25	0.639
87.	<i>Microhyla carolinensis</i>	0.811	-0.091	3.5	0.544	15	0.367
88.	<i>Molga torosa?</i>	1.452	0.162	17.5	1.243	18.5	0.867
89.	<i>Necturus maculosus</i>	0.110	-0.959	125	2.097	25	0.110
90.	<i>Notophthalmus viridescens</i>	0.372	-0.429	3	0.477	20	0.250
91.	<i>Occidozyga martensii</i>	0.291	-0.536	9.3	0.968	35	0.644
92.	<i>Odontophrynus americanus</i>	0.297	-0.527	15.24	1.183	20	0.200
93.	<i>Osteopilus septentrionalis</i>	0.546	-0.263	5	0.699	20	0.367
94.	<i>Phyllomedusa sauvagei</i>	0.529	-0.277	17.5	1.243	10	0.161
95.	<i>Physalaemus pustulosus</i>	0.650	-0.187	2.9	0.462	25	0.650
96.	<i>Plethodon cinereus</i>	0.283	-0.548	0.6	-0.222	17.5	0.156
97.	<i>Plethodon dorsalis</i>	0.192	-0.717	0.69	-0.161	25	0.192
98.	<i>Plethodon glutinosus</i>	0.275	-0.561	5.01	0.700	20	0.185
99.	<i>Plethodon jordani</i>	0.234	-0.631	3.1	0.491	5	0.048
100.	<i>Plethodon neomexicanus</i>	0.339	-0.470	2.47	0.393	25	0.339
101.	<i>Plethodon spp.</i>	0.403	-0.395	3.25	0.512	22	0.318
102.	<i>Pseudacris nigrita</i>	0.900	-0.046	1	0.000	25	0.900
103.	<i>Pseudacris triseriata</i>	0.405	-0.393	0.94	-0.027	5	0.083
104.	<i>Pseudobranchius striatus</i>	0.283	-0.548	2.19	0.340	25	0.283
105.	<i>Pseudoeurycea belli</i>	0.163	-0.788	24.45	1.388	25	0.163
106.	<i>Pseudoeurycea brunnata</i>	2.420	0.384	3.33	0.522	15	1.095
107.	<i>Pseudoeurycea cephalica</i>	0.301	-0.521	1.45	0.161	15	0.136
108.	<i>Pseudoeurycea cochranae</i>	0.252	-0.599	2.23	0.348	15	0.114
109.	<i>Pseudoeurycea gadovii</i>	0.362	-0.441	2.88	0.459	15	0.164
110.	<i>Pseudoeurycea goebeli</i>	0.259	-0.587	3.78	0.577	5	0.053
111.	<i>Pseudoeurycea leprosa</i>	0.278	-0.556	2.46	0.391	15	0.126

112.	<i>Pseudoeurycea rex</i>	0.259	-0.587	1.86	0.270	15	0.117
113.	<i>Pseudoeurycea smithii</i>	0.219	-0.660	6.66	0.823	15	0.099
114.	<i>Pseudotriton ruber</i>	0.171	-0.767	10.81	1.034	5	0.035
115.	<i>Pternohyla fodiens</i>	0.265	-0.577	15.1	1.179	20	0.178
116.	<i>Pyxicephalus adspersus</i>	0.210	-0.678	562.3	2.750	20	0.141
117.	<i>Rana arvalis</i>	0.674	-0.171	17	1.230	5	0.138
118.	<i>Rana aspersa</i>	0.524	-0.281	563	2.751	18.5	0.313
119.	<i>Rana berlandieri</i>	0.406	-0.391	70	1.845	29	0.558
120.	<i>Rana blythi</i>	0.274	-0.562	88.7	1.948	25	0.274
121.	<i>Rana cancrivora</i>	0.413	-0.384	20.45	1.311	30	0.614
122.	<i>Rana catesbeiana</i>	0.137	-0.863	262	2.418	5	0.028
123.	<i>Rana chalconota</i>	0.530	-0.276	4.1	0.613	25	0.530
124.	<i>Rana clamitans</i>	0.462	-0.335	32.5	1.512	25	0.462
125.	<i>Rana cyanophlyctis</i>	2.968	0.472	0.294	-0.532	29	4.076
126.	<i>Rana erythraea</i>	0.115	-0.939	19	1.279	15	0.052
127.	<i>Rana esculenta</i>	0.108	-0.967	15.2	1.182	23	0.092
128.	<i>Rana hexadactyla</i>	0.934	-0.030	51.9	1.715	29	1.283
129.	<i>Rana magna</i>	0.311	-0.507	34.2	1.534	30	0.463
130.	<i>Rana muscosa</i>	0.217	-0.664	13.5	1.130	4	0.041
131.	<i>Rana nicobariensis</i>	0.547	-0.262	2.6	0.415	25	0.547
132.	<i>Rana palustris</i>	0.748	-0.126	36	1.556	21.5	0.567
133.	<i>Rana pipiens</i>	0.256	-0.592	34.8	1.542	10	0.078
134.	<i>Rana ridibunda</i>	0.265	-0.577	35	1.544	20	0.178
135.	<i>Rana sylvatica</i>	0.600	-0.222	6	0.778	25	0.600
136.	<i>Rana temporaria</i>	0.088	-1.056	39	1.591	15	0.040
137.	<i>Rana virgatipes</i>	0.542	-0.266	7	0.845	5	0.111
138.	<i>Rhyacotriton olympicus</i>	1.178	0.071	2.6	0.415	15	0.533
139.	<i>Salamandra maculosa</i>	1.197	0.078	28.32	1.452	18.5	0.715
140.	<i>Salamandra salamandra</i>	0.171	-0.767	75	1.875	16	0.084
141.	<i>Scaphiopus bombifrons</i>	1.708	0.232	13.3	1.124	15	0.773
142.	<i>Scaphiopus couchii</i>	0.564	-0.249	24.6	1.391	21	0.411
143.	<i>Scaphiopus hammondii</i>	0.687	-0.163	12.74	1.105	21	0.500
144.	<i>Scaphiopus holbrooki</i>	1.028	0.012	14	1.146	15	0.465
145.	<i>Siren intermedia</i>	0.183	-0.738	13.7	1.137	25	0.183
146.	<i>Siren lacertina</i>	0.063	-1.201	269	2.430	25	0.063
147.	<i>Smilisca baudinii</i>	0.820	-0.086	23.7	1.375	15	0.371
148.	<i>Taricha granulosa</i>	0.301	-0.521	6.56	0.817	15	0.136
149.	<i>Taricha rivularis</i>	0.340	-0.469	10.83	1.035	15	0.154
150.	<i>Taricha torosa</i>	0.164	-0.785	9.87	0.994	10	0.050
151.	<i>Telmatobius culeus</i>	0.256	-0.592	122.3	2.087	10	0.078
152.	<i>Telmatobius marmoratus</i>	0.913	-0.040	18.4	1.265	10	0.278
153.	<i>Thorius sp.</i>	0.316	-0.500	0.31	-0.509	15	0.143
154.	<i>Triturus cristatus</i>	1.005	0.002	7	0.845	10	0.306
155.	<i>Triturus vulgaris</i>	1.033	0.014	8.75	0.942	25	1.033
156.	<i>Typhlonectes compressicauda</i>	0.262	-0.582	30.62	1.486	25	0.262
157.	<i>Xenopus laevis</i>	0.227	-0.644	139	2.143	20	0.153
158.	<i>Xenopus mulleri</i>	1.096	0.040	24	1.380	17	0.581

Table S5b. Standard metabolic rates in reptiles (after White et al. 2006)

Species	q25Wkg	Logq25Wkg	Mg	LogMg	TC	qWkg	
1.	<i>Acabthodactylus boskianus</i>	0.437	-0.360	7.8	0.892	40	1.667
2.	<i>Acanthodactylus erythrurus</i>	0.797	-0.099	9	0.954	35	1.945
3.	<i>Acanthodactylus ophiodurus</i>	0.740	-0.131	3.8	0.580	30	1.156
4.	<i>Acanthodactylus pardalis</i>	1.020	0.009	9.7	0.987	40	3.889
5.	<i>Acanthodactylus schmidti</i>	0.505	-0.297	14.5	1.161	35	1.233
6.	<i>Acanthodactylus schreiberi</i>	0.407	-0.390	10.9	1.037	40	1.550
7.	<i>Acanthodactylus scutellatus</i>	0.671	-0.173	6.6	0.820	40	2.556
8.	<i>Acanthophis praelongus</i>	0.167	-0.777	105.5	2.023	30	0.261
9.	<i>Acontias meleagris</i>	0.253	-0.597	7.3	0.863	33	0.517
10.	<i>Acrantophis dumerili</i>	0.066	-1.180	2548.5	3.406	20	0.042
11.	<i>Acrochordus araduræ</i>	0.084	-1.076	1047.7	3.020	30	0.131
12.	<i>Aligator mississippiensis</i>	0.118	-0.928	1287	3.110	10	0.031
13.	<i>Amblyrhynchus cristatus</i>	0.203	-0.693	747.5	2.874	25	0.203
14.	<i>Amphibolurus barbatus</i>	0.267	-0.573	373	2.572	37	0.778
15.	<i>Amphibolurus nuchalis</i>	0.351	-0.455	24.65	1.392	40	1.339
16.	<i>Anarbylus switaki</i>	0.410	-0.387	9.48	0.977	25	0.410
17.	<i>Anguis fragilis</i>	0.209	-0.680	12.067	1.082	30	0.327
18.	<i>Anniella pulchra</i>	0.363	-0.440	4.8466	0.685	25	0.363
19.	<i>Anolis acutus</i>	1.031	0.013	4.3	0.633	30	1.611
20.	<i>Anolis bonariensis</i>	0.302	-0.520	12	1.079	27	0.361
21.	<i>Anolis carolinensis</i>	0.669	-0.175	4.5	0.653	30	1.045
22.	<i>Anolis limifrons</i>	0.694	-0.159	1.5	0.176	20	0.444
23.	<i>Antaresia childreni</i>	0.212	-0.674	331.7	2.521	24	0.194
24.	<i>Antaresia stimsoni</i>	0.203	-0.693	349.9	2.544	30	0.317
25.	<i>Aspidites melanocephalus</i>	0.223	-0.652	1027.5	3.012	24	0.204

26.	<i>Blanus cinereus</i>	0.626	-0.203	2.4	0.380	30	0.978
27.	<i>Boa constrictor</i>	0.058	-1.237	7815.5	3.893	30	0.090
28.	<i>Bunopus tuberculatus</i>	2.330	0.367	2.5	0.398	35	5.684
29.	<i>Candoia carinatus</i>	0.064	-1.194	521.9	2.718	20	0.041
30.	<i>Chalcides ocellatus</i>	0.256	-0.592	22.06	1.344	33	0.522
31.	<i>Chelydra serpentina</i>	0.072	-1.143	3473	3.541	10	0.019
32.	<i>Chironius quadricarinatus</i>	0.295	-0.530	61	1.785	20	0.189
33.	<i>Cnemidophorus murinus</i>	0.267	-0.573	85	1.929	40	1.017
34.	<i>Cnemidophorus tigris</i>	0.498	-0.303	18	1.255	30	0.778
35.	<i>Coleonyx variegatus</i>	0.814	-0.089	3.43	0.535	25	0.814
36.	<i>Coluber constrictor</i>	0.146	-0.836	262	2.418	35	0.356
37.	<i>Corallus caninus</i>	0.077	-1.114	556	2.745	20	0.049
38.	<i>Corallus enhydris</i>	0.083	-1.081	802	2.904	30	0.130
39.	<i>Cosymbotus platyurus</i>	0.465	-0.333	3.5	0.544	27	0.556
40.	<i>Crotalus viridis</i>	0.146	-0.836	301	2.479	35	0.356
41.	<i>Crotaphytus collaris</i>	0.534	-0.272	30	1.477	37	1.556
42.	<i>Ctenotus labillardieri</i>	0.620	-0.208	2.8	0.447	20	0.397
43.	<i>Cyclagras gigas</i>	0.278	-0.556	2680	3.428	20	0.178
44.	<i>Diadophis punctatus</i>	0.469	-0.329	4.4	0.643	30	0.733
45.	<i>Diplometopon zarudnyi</i>	0.348	-0.458	6.34	0.802	35	0.850
46.	<i>Dipsas albifrons</i>	0.312	-0.506	22	1.342	20	0.200
47.	<i>Dipsosaurus dorsalis</i>	0.233	-0.633	40.36	1.606	45	1.389
48.	<i>Egernia cunninghami</i>	0.295	-0.530	261	2.417	20	0.189
49.	<i>Elaphe guttata</i>	0.628	-0.202	800	2.903	25	0.628
50.	<i>Epicrates cenchria</i>	0.104	-0.983	416	2.619	30	0.162
51.	<i>Eryx colubrinus</i>	0.128	-0.893	85.85	1.934	20	0.082
52.	<i>Eumeces fasciatus</i>	0.853	-0.069	7	0.845	30	1.333
53.	<i>Eumeces inexpectatus</i>	0.544	-0.264	9.6	0.982	30	0.850
54.	<i>Eumeces obsoletus</i>	0.434	-0.363	30	1.477	20	0.278
55.	<i>Eunectes murinus</i>	0.183	-0.738	1130	3.053	20	0.117
56.	<i>Eunectes notaeus</i>	0.130	-0.886	14400	4.158	20	0.083
57.	<i>Garthia gaudichaudi</i>	0.531	-0.275	0.805	-0.094	25	0.531
58.	<i>Gekko gecko</i>	0.343	-0.465	61.5	1.789	30	0.536
59.	<i>Gerrhonotus multicarinatus</i>	0.494	-0.306	29	1.462	20	0.316
60.	<i>Gonotodes antillensis</i>	0.413	-0.384	1.8	0.255	34	0.922
61.	<i>Helicops modestus</i>	0.196	-0.708	196	2.292	30	0.306
62.	<i>Hemidactylus frenatus</i>	0.488	-0.312	2	0.301	27	0.583
63.	<i>Iguana iguana</i>	0.286	-0.544	795	2.900	37	0.833
64.	<i>Klauberina riversiana</i>	0.045	-1.347	19	1.279	35	0.111
65.	<i>Lacerta agilis</i>	1.109	0.045	8.4	0.924	35	2.706
66.	<i>Lacerta sicula</i>	0.472	-0.326	9	0.954	20	0.302
67.	<i>Lacerta trilineata</i>	0.198	-0.703	71	1.851	20	0.127
68.	<i>Lacerta viridis</i>	0.234	-0.631	31	1.491	20	0.150
69.	<i>Lacerta vivipara</i>	0.843	-0.074	3.95	0.597	30	1.317
70.	<i>Lampropeltis getulus</i>	0.143	-0.845	1217	3.085	26	0.156
71.	<i>Lampropeltis miliaris</i>	0.267	-0.573	401	2.603	25	0.267
72.	<i>Leimadophis poecilogyrus</i>	0.347	-0.460	42	1.623	20	0.222
73.	<i>Lepidophyma gaigeae</i>	0.366	-0.437	5	0.699	15	0.150
74.	<i>Lepidophyma smithi</i>	0.249	-0.604	25	1.398	30	0.389
75.	<i>Liasis fuscus</i>	0.078	-1.108	1306.9	3.116	30	0.122
76.	<i>Liasis olivaceus</i>	0.091	-1.041	3000.7	3.477	24	0.083
77.	<i>Lichanura roseofusca</i>	0.208	-0.682	314	2.497	32	0.389
78.	<i>Lichanura trivirgata</i>	0.114	-0.943	182	2.260	20	0.073
79.	<i>Masticodyras bifossatus</i>	0.373	-0.428	735	2.866	20	0.239
80.	<i>Masticophis flagellum</i>	1.936	0.287	262	2.418	35	4.723
81.	<i>Morelia spilota variegata</i>	0.092	-1.036	2173.5	3.337	30	0.144
82.	<i>Natrix maura</i>	0.214	-0.670	22.5	1.352	5	0.036
83.	<i>Natrix natrix helretica</i>	0.131	-0.883	82.5	1.916	5	0.022
84.	<i>Nerodia rhombifera</i>	0.338	-0.471	238	2.377	30	0.528
85.	<i>Ophisaurus ventralis</i>	0.214	-0.670	32.185	1.508	25	0.214
86.	<i>Oxyrhopus trigeminus</i>	0.303	-0.519	98	1.991	20	0.194
87.	<i>Pelamis platurus</i>	0.213	-0.672	116	2.064	30	0.333
88.	<i>Philodryas olfersii</i>	0.339	-0.470	176	2.246	20	0.217
89.	<i>Philodryas patagoniensis</i>	0.442	-0.355	388	2.589	20	0.283
90.	<i>Philodryas serra</i>	0.303	-0.519	135	2.130	20	0.194
91.	<i>Phrynosoma cornutum</i>	0.378	-0.423	35	1.544	35	0.922
92.	<i>Phrynosoma douglassi</i>	0.389	-0.410	28	1.447	35	0.950
93.	<i>Phrynosoma m'calli</i>	0.524	-0.281	16	1.204	37	1.528
94.	<i>Physignathus lesueurii</i>	0.267	-0.573	504	2.702	37	0.778
95.	<i>Pituophis melanoleucus</i>	0.166	-0.780	548	2.739	20	0.106
96.	<i>Pituophis catenifer affinis</i>	0.142	-0.848	548	2.739	30	0.222
97.	<i>Podarcis hispanica</i>	0.423	-0.374	3.43	0.535	10	0.111
98.	<i>Podarcis lilfordi brauni</i>	0.634	-0.198	7.4	0.869	20	0.406
99.	<i>Podarcis muralis</i>	0.972	-0.012	5.5	0.740	35	2.372
100.	<i>Psammotromus algerius</i>	1.067	0.028	5.2	0.716	20	0.683
101.	<i>Pseudemys scripta</i>	0.080	-1.097	305	2.484	10	0.021
102.	<i>Pseudonaja nuchalis</i>	0.201	-0.697	214.1	2.331	33	0.411
103.	<i>Ptyodactylus hasselquistii</i>	0.519	-0.285	8.5	0.929	30	0.811
104.	<i>Python curtis</i>	0.064	-1.194	2373.5	3.375	20	0.041

105.	<i>Python molurus</i>	0.044	-1.357	29777.25	4.474	20	0.028
106.	<i>Python regius</i>	0.077	-1.114	787	2.896	20	0.049
107.	<i>Python reticulatus</i>	0.078	-1.108	14326	4.156	20	0.050
108.	<i>Python sebae</i>	0.061	-1.215	16140	4.208	20	0.039
109.	<i>Salvadora hexalepis</i>	0.380	-0.420	65	1.813	30	0.594
110.	<i>Sauromalus hispidus</i>	0.155	-0.810	574	2.759	20	0.099
111.	<i>Sauromalus obesus</i>	0.251	-0.600	150	2.176	20	0.161
112.	<i>Sceloporus graciosus</i>	0.489	-0.311	5	0.699	25	0.489
113.	<i>Sceloporus occidentalis</i>	0.600	-0.222	10.105	1.005	25	0.600
114.	<i>Sceloporus olivaceus</i>	0.572	-0.243	24	1.380	20	0.366
115.	<i>Sceloporus undulatus</i>	0.339	-0.470	3.8	0.580	20	0.217
116.	<i>Sceloporus variabilis</i>	3.495	0.543	12.215	1.087	10	0.917
117.	<i>Scelotes granovii</i>	0.618	-0.209	1.1	0.041	33	1.261
118.	<i>Scincella lateralis</i>	1.042	0.018	1	0.000	20	0.667
119.	<i>Scinus mitranus</i>	0.341	-0.467	14.6	1.164	35	0.833
120.	<i>Sibynomorphis mikanii</i>	1.067	0.028	11	1.041	20	0.683
121.	<i>Spalerosophis cliffordi</i>	0.433	-0.364	300	2.477	35	1.056
122.	<i>Sphaerodactylus beattyi</i>	0.800	-0.097	0.4	-0.398	30	1.250
123.	<i>Sphaerodactylus cinereus</i>	0.465	-0.333	0.4	-0.398	27	0.556
124.	<i>Sphaerodactylus macrolepis</i>	0.925	-0.034	0.5	-0.301	30	1.445
125.	<i>Sphenodon punctatum</i>	0.172	-0.764	430	2.633	25	0.172
126.	<i>Sphenops sepsoides</i>	0.281	-0.551	7.4	0.869	30	0.439
127.	<i>Storeria dekayi</i>	0.576	-0.240	7.2	0.857	30	0.900
128.	<i>Tarentola mauritanica</i>	0.414	-0.383	6.6	0.820	35	1.011
129.	<i>Terrapene ornata ornata</i>	0.015	-1.824	354	2.549	10	0.004
130.	<i>Thamnodyastes strigatus</i>	0.356	-0.449	55	1.740	20	0.228
131.	<i>Thamnophis butleri</i>	0.342	-0.466	19.02	1.279	25	0.342
132.	<i>Thamnophis proximus</i>	0.533	-0.273	31	1.491	30	0.833
133.	<i>Thamnophis sirtalis</i>	0.128	-0.893	200	2.301	29	0.183
134.	<i>Tiliqua rugosa</i>	0.328	-0.484	508.6	2.706	35	0.800
135.	<i>Tiliqua scincoides</i>	0.234	-0.631	493	2.693	20	0.150
136.	<i>Trachydosaurus rugosus</i>	0.261	-0.583	461	2.664	20	0.167
137.	<i>Trogonophis weigmanni</i>	0.214	-0.670	4.985	0.698	25	0.214
138.	<i>Uromastix microlepis</i>	0.105	-0.979	289.84	2.462	20	0.067
139.	<i>Uta mearnsi</i>	0.339	-0.470	14	1.146	20	0.217
140.	<i>Uta stansburiana</i>	0.572	-0.243	3.625	0.559	37	1.667
141.	<i>Varanus albigularis</i>	0.353	-0.452	963	2.984	35	0.861
142.	<i>Varanus bengalensis</i>	0.181	-0.742	3440	3.537	30	0.283
143.	<i>Varanus exanthematicus</i>	2.743	0.438	3836	3.584	25	2.743
144.	<i>Varanus giganteus</i>	0.220	-0.658	2496	3.397	25.9	0.238
145.	<i>Varanus gilleni</i>	0.371	-0.431	27.5	1.439	37	1.083
146.	<i>Varanus gouldi</i>	0.208	-0.682	674	2.829	20	0.133
147.	<i>Varanus mertensi</i>	0.177	-0.752	904	2.956	35	0.433
148.	<i>Varanus panoptes</i>	0.227	-0.644	2005	3.302	20.5	0.152
149.	<i>Varanus varius</i>	0.178	-0.750	4410	3.644	30	0.278
150.	<i>Varnus rosenbergi</i>	0.300	-0.523	1269.3	3.104	35	0.733
151.	<i>Vipera berus</i>	0.500	-0.301	63	1.799	25	0.500
152.	<i>Xantusia henshawi</i>	0.503	-0.298	3.5	0.544	15	0.206
153.	<i>Xantusia vigilis</i>	0.614	-0.212	1.5	0.176	30	0.959
154.	<i>Xenodon guentheri</i>	0.303	-0.519	50	1.699	20	0.194
155.	<i>Xenodon merremii</i>	0.373	-0.428	502	2.701	20	0.239
156.	<i>Xenodon neuwiedii</i>	0.322	-0.492	53	1.724	20	0.206

Table S5c. Standard and routine metabolic rates in fish (after www.fishbase.org)

Note: N is the number of metabolic rate values available for each species at www.fishbase.org; qWkg is the minimum of the N values.

Species	q25Wkg	Logq25Wkg	Mg	LogMg	TC	qWkg	N	
1.	<i>Abramis brama</i>	0.746	-0.127	102.90	2.012	18.0	0.5252	40
2.	<i>Acanthopagrus schlegelii schlegelii</i>	0.117	-0.932	254.00	2.405	25.0	0.1167	21
3.	<i>Acipenser gueldenstaedtii</i>	0.387	-0.412	208.00	2.318	18.0	0.2723	8
4.	<i>Acipenser nudiiventris</i>	0.714	-0.146	89.00	1.949	19.0	0.5290	1
5.	<i>Acipenser ruthenus</i>	0.175	-0.757	258.00	2.412	20.0	0.1362	4
6.	<i>Acipenser stellatus</i>	0.345	-0.462	6500.00	3.813	20.0	0.2684	22
7.	<i>Acipenser transmontanus</i>	0.019	-1.721	950.00	2.978	15.0	0.0117	10
8.	<i>Aequidens pulcher</i>	0.475	-0.323	5.00	0.699	25.0	0.4746	1
9.	<i>Alburnus alburnus</i>	0.729	-0.137	9.00	0.954	8.0	0.3112	4
10.	<i>Ambassis interrupta</i>	0.315	-0.502	5.00	0.699	25.0	0.3151	10
11.	<i>Ameiurus melas</i>	0.424	-0.373	50.00	1.699	17.0	0.2840	3
12.	<i>Ameiurus natalis</i>	0.334	-0.476	20.00	1.301	15.0	0.2023	6
13.	<i>Ameiurus nebulosus</i>	0.165	-0.783	116.00	2.064	10.0	0.0778	90
14.	<i>Anabas testudineus</i>	0.017	-1.770	27.62	1.441	28.0	0.0195	86
15.	<i>Anarhichas minor</i>	0.458	-0.339	27.50	1.439	1.35	0.1400	1
16.	<i>Anguilla anguilla</i>	0.128	-0.893	71.10	1.852	14.0	0.0739	151
17.	<i>Anguilla australis australis</i>	0.110	-0.959	700.00	2.845	20.0	0.0856	2
18.	<i>Anguilla japonica</i>	0.132	-0.879	325.00	2.512	14.5	0.0778	34

19.	<i>Anguilla rostrata</i>	0.135	-0.870	315.00	2.498	15.0	0.0817	19
20.	<i>Anoplogaster cornuta</i>	0.032	-1.495	36.70	1.565	5.0	0.0117	14
21.	<i>Aphanius dispar dispar</i>	1.940	0.288	0.56	-0.252	17.0	1.2993	5
22.	<i>Arapaima gigas</i>	0.084	-1.076	2300.00	3.362	28.0	0.0973	35
23.	<i>Aristostomias lunifer</i>	0.159	-0.799	21.10	1.324	5.0	0.0584	1
24.	<i>Bajacalifornia burragei</i>	0.085	-1.071	24.90	1.396	5.0	0.0311	1
25.	<i>Balistes capriscus</i>	0.476	-0.322	320.00	2.505	17.5	0.3268	3
26.	<i>Bathylagus antarcticus</i>	0.349	-0.457	27.15	1.434	0.25	0.1011	1
27.	<i>Bathylagus stilbius</i>	0.371	-0.431	8.55	0.932	5.0	0.1362	1
28.	<i>Bathylagus wesethi</i>	1.121	0.050	1.50	0.176	10.0	0.5290	1
29.	<i>Benthalbella elongata</i>	0.712	-0.148	35.30	1.548	0.25	0.2062	1
30.	<i>Boreogadus saida</i>	0.233	-0.633	110.00	2.041	1.0	0.0700	7
31.	<i>Borostomias panamensis</i>	0.265	-0.577	110.25	2.042	5.0	0.0973	2
32.	<i>Brevoortia tyrannus</i>	0.841	-0.075	78.40	1.894	10.0	0.3968	21
33.	<i>Callionymus lyra</i>	0.161	-0.793	105.00	2.021	11.5	0.0817	28
34.	<i>Campostoma anomalum</i>	1.038	0.016	19.25	1.284	17.9	0.7274	1
35.	<i>Caranx hippos</i>	1.466	0.166	38.30	1.583	14.7	0.8753	1
36.	<i>Carassius auratus auratus</i>	0.127	-0.896	3.80	0.580	5.0	0.0467	310
37.	<i>Carassius carassius</i>	0.106	-0.975	12.50	1.097	5.0	0.0389	32
38.	<i>Catostomus commersonii</i>	0.289	-0.539	100.00	2.000	10.0	0.1362	48
39.	<i>Catostomus tahoensis</i>	0.574	-0.241	43.73	1.641	8.0	0.2451	6
40.	<i>Centropristis striata</i>	0.389	-0.410	84.00	1.924	25.0	0.3890	5
41.	<i>Chaenocephalus aceratus</i>	0.221	-0.656	1130.00	3.053	2.0	0.0700	24
42.	<i>Channa marulius</i>	0.121	-0.917	93.00	1.968	30.0	0.1556	16
43.	<i>Channa orientalis</i>	0.164	-0.785	30.00	1.477	30.0	0.2101	52
44.	<i>Channa punctata</i>	0.067	-1.174	12.50	1.097	26.0	0.0700	84
45.	<i>Channa striata</i>	0.130	-0.886	82.00	1.914	30.0	0.1673	11
46.	<i>Channichthys rhinocerus</i>	0.713	-0.147	200.00	2.301	5.5	0.2684	2
47.	<i>Chanos chanos</i>	2.692	0.430	0.70	-0.155	25.0	2.6919	56
48.	<i>Chiasmodon niger</i>	0.468	-0.330	76.60	1.884	2.5	0.1517	1
49.	<i>Chiloscyllium plagiosum</i>	0.202	-0.695	880.00	2.944	23.0	0.1828	3
50.	<i>Chromis chromis</i>	0.812	-0.090	10.40	1.017	16.0	0.5174	4
51.	<i>Cichlasoma bimaculatum</i>	0.267	-0.573	11.00	1.041	22.0	0.2295	38
52.	<i>Cirrhinus cirrhosus</i>	0.213	-0.672	1821.00	3.260	21.5	0.1789	87
53.	<i>Citharichthys stigmaeus</i>	0.513	-0.290	15.00	1.176	15.0	0.3112	1
54.	<i>Clarias batrachus</i>	0.204	-0.690	77.00	1.886	26.0	0.2140	9
55.	<i>Clinocottus analis</i>	0.610	-0.215	37.00	1.568	20.0	0.4746	1
56.	<i>Colisa fasciata</i>	0.348	-0.458	0.92	-0.036	28.0	0.4046	42
57.	<i>Colossoma macropomum</i>	0.195	-0.710	1760.00	3.246	25.0	0.1945	115
58.	<i>Conger conger</i>	0.610	-0.215	545.00	2.736	13.0	0.3345	5
59.	<i>Coregonus autumnalis</i>	1.309	0.117	234.00	2.369	7.2	0.5368	4
60.	<i>Coregonus fera</i>	4.049	0.607	0.11	-0.959	14.0	2.3340	26
61.	<i>Coregonus sardinella</i>	0.935	-0.029	365.00	2.562	9.2	0.4240	22
62.	<i>Coryphaena equiselis</i>	6.114	0.786	0.03	-1.523	23.0	5.5316	71
63.	<i>Coryphaena hippurus</i>	3.114	0.493	0.90	-0.046	13.5	1.7505	1
64.	<i>Coryphaenoides armatus</i>	0.047	-1.328	1200.00	3.079	3.0	0.0156	3
65.	<i>Cottus gobio</i>	1.961	0.292	2.90	0.462	18.0	1.3810	1
66.	<i>Ctenopharyngodon idella</i>	0.497	-0.304	16.05	1.205	22.0	0.4279	8
67.	<i>Cyclothone acclinidens</i>	0.281	-0.551	0.87	-0.060	3.0	0.0934	9
68.	<i>Cyclothone microdon</i>	0.309	-0.510	0.78	-0.108	0.25	0.0895	1
69.	<i>Cyprinodon variegatus variegatus</i>	0.661	-0.180	2.40	0.380	25.0	0.6613	18
70.	<i>Cyprinus carpio carpio</i>	0.140	-0.854	174.00	2.241	10.0	0.0661	208
71.	<i>Dactylopterus volitans</i>	14.340	1.157	0.02	-1.699	23.0	12.9732	14
72.	<i>Dasyatis sabina</i>	0.282	-0.550	503.00	2.702	22.2	0.2451	10
73.	<i>Diaphus theta</i>	1.620	0.210	2.65	0.423	5.0	0.5952	2
74.	<i>Diplodus sargus sargus</i>	1.275	0.106	25.75	1.411	14.0	0.7352	2
75.	<i>Dorosoma cepedianum</i>	0.417	-0.380	87.70	1.943	13.4	0.2334	52
76.	<i>Echiichthys vipera</i>	1.239	0.093	10.50	1.021	18.5	0.8947	2
77.	<i>Electrona antarctica</i>	0.806	-0.094	7.90	0.898	0.25	0.2334	1
78.	<i>Embiotoca lateralis</i>	0.687	-0.163	599.00	2.777	15.0	0.4162	2
79.	<i>Encheliophis homei</i>	0.260	-0.585	7.50	0.875	30.0	0.3345	6
80.	<i>Engraulis japonicus</i>	1.263	0.101	628.79	2.799	16.2	0.8130	15
81.	<i>Epinephelus akaara</i>	0.175	-0.757	281.00	2.449	25.0	0.1751	30
82.	<i>Erimyzon oblongus</i>	0.824	-0.084	25.80	1.412	18.5	0.5952	1
83.	<i>Erpetoichthys calabaricus</i>	0.405	-0.393	27.40	1.438	27.0	0.4474	1
84.	<i>Esomus danricus</i>	1.661	0.220	0.62	-0.208	27.5	1.8828	20
85.	<i>Esox lucius</i>	0.212	-0.674	600.00	2.778	5.0	0.0778	26
86.	<i>Esox masquinongy</i>	1.070	0.029	12.20	1.086	5.0	0.3929	9
87.	<i>Etheostoma blennioides</i>	1.189	0.075	12.35	1.092	17.5	0.8169	1
88.	<i>Euthynnus affinis</i>	2.057	0.313	2260.00	3.354	24.0	1.9567	1
89.	<i>Exodon paradoxus</i>	0.190	-0.721	3.85	0.585	20.0	0.1478	4
90.	<i>Fundulus grandis</i>	0.035	-1.456	31.50	1.498	25.0	0.0350	22
91.	<i>Fundulus heteroclitus heteroclitus</i>	0.138	-0.860	9.00	0.954	5.0	0.0506	18
92.	<i>Fundulus parvipinnis</i>	0.030	-1.523	6.00	0.778	20.0	0.0233	11
93.	<i>Fundulus similis</i>	0.031	-1.509	21.00	1.322	25.0	0.0311	22
94.	<i>Gadus morhua</i>	0.328	-0.484	6650.00	3.823	3.0	0.1089	140
95.	<i>Gadus ogac</i>	0.871	-0.060	180.00	2.255	0.0	0.2490	1
96.	<i>Gambusia affinis</i>	1.377	0.139	0.24	-0.620	10.0	0.6496	27
97.	<i>Gambusia holbrooki</i>	0.303	-0.519	0.30	-0.523	27.0	0.3345	16

98.	<i>Gasterosteus aculeatus aculeatus</i>	0.907	-0.042	1.95	0.290	10.0	0.4279	22
99.	<i>Genyagnus monopterygius</i>	0.058	-1.237	164.00	2.215	17.0	0.0389	21
100.	<i>Gilchristella aestuaria</i>	1.046	0.020	1.44	0.158	15.0	0.6341	20
101.	<i>Gillichthys mirabilis</i>	0.030	-1.523	16.70	1.223	20.0	0.0233	75
102.	<i>Girella nigricans</i>	0.475	-0.323	210.00	2.322	18.0	0.3345	5
103.	<i>Glossogobius giuris</i>	0.126	-0.900	15.00	1.176	26.0	0.1323	42
104.	<i>Gnathonemus petersii</i>	0.377	-0.424	5.85	0.767	26.0	0.3968	1
105.	<i>Gobio gobio gobio</i>	1.096	0.040	17.00	1.230	12.0	0.5718	6
106.	<i>Gobionotothen gibberifrons</i>	0.309	-0.510	470.00	2.672	0.25	0.0895	1
107.	<i>Gobius paganellus</i>	0.937	-0.028	10.50	1.021	23.1	0.8519	1
108.	<i>Gymnocephalus cernuus</i>	0.825	-0.084	64.80	1.812	17.0	0.5524	2
109.	<i>Gymnodraco acuticeps</i>	0.484	-0.315	87.20	1.941	-0.3	0.1362	2
110.	<i>Gymnoscopelus braueri</i>	0.510	-0.292	11.40	1.057	0.25	0.1478	1
111.	<i>Gymnoscopelus opisthopterus</i>	0.430	-0.367	23.55	1.372	0.25	0.1245	1
112.	<i>Harpagifer georgianus</i>	0.025	-1.602	4.13	0.616	1.5	0.0078	1
113.	<i>Hemichromis bimaculatus</i>	0.751	-0.124	3.00	0.477	25.0	0.7508	1
114.	<i>Heteropneustes fossilis</i>	0.204	-0.690	45.00	1.653	18.0	0.1439	36
115.	<i>Hippocampus hippocampus</i>	0.712	-0.148	10.00	1.000	18.0	0.5018	5
116.	<i>Hippoglossoides platessoides</i>	0.194	-0.712	390.00	2.591	3.5	0.0661	5
117.	<i>Hoplerythrinus unitaeniatus</i>	0.127	-0.896	243.00	2.386	28.5	0.1517	55
118.	<i>Ichthyomyzon fossor</i>	0.845	-0.073	3.78	0.577	18.0	0.5952	1
119.	<i>Ictalurus punctatus</i>	0.232	-0.635	825.00	2.916	18.0	0.1634	29
120.	<i>Katsuwonus pelamis</i>	0.881	-0.055	632.00	2.801	23.5	0.8169	47
121.	<i>Kuhlia sandvicensis</i>	0.254	-0.595	55.97	1.748	23.0	0.2295	62
122.	<i>Labeo calbasu</i>	0.196	-0.708	0.30	-0.523	27.5	0.2217	8
123.	<i>Labeo capensis</i>	0.355	-0.450	357.96	2.554	8.0	0.1517	49
124.	<i>Labeo rohita</i>	0.764	-0.117	5.00	0.699	29.0	0.9336	10
125.	<i>Labeobarbus aeneus</i>	0.140	-0.854	325.50	2.513	10.0	0.0661	28
126.	<i>Labrus bergylta</i>	0.470	-0.328	125.00	2.097	18.0	0.3307	4
127.	<i>Lagodon rhomboides</i>	0.226	-0.646	13.50	1.130	25.0	0.2256	14
128.	<i>Lampetra fluviatilis</i>	0.185	-0.733	1.43	0.155	4.4	0.0661	62
129.	<i>Lampetra planeri</i>	0.146	-0.836	2.79	0.446	5.3	0.0545	17
130.	<i>Leiostomus xanthurus</i>	0.218	-0.662	11.10	1.045	25.0	0.2178	85
131.	<i>Lepidocephalichthys guntea</i>	0.573	-0.242	1.27	0.104	24.0	0.5446	8
132.	<i>Lepidogalaxias salamandroides</i>	0.270	-0.569	0.62	-0.208	20.0	0.2101	31
133.	<i>Lepomis cyanellus</i>	0.834	-0.079	10.00	1.000	15.0	0.5057	3
134.	<i>Lepomis gibbosus</i>	0.244	-0.613	30.00	1.477	5.0	0.0895	9
135.	<i>Lepomis macrochirus</i>	0.151	-0.821	133.00	2.124	30.0	0.1945	250
136.	<i>Leporinus fasciatus</i>	0.541	-0.267	3.95	0.597	25.0	0.5407	3
137.	<i>Leucaspis delineatus</i>	2.199	0.342	1.52	0.182	20.0	1.7116	1
138.	<i>Leuciscus cephalus</i>	0.719	-0.143	14.00	1.146	15.0	0.4357	18
139.	<i>Leuciscus idus</i>	0.212	-0.674	600.00	2.778	5.0	0.0778	15
140.	<i>Leuciscus leuciscus</i>	2.143	0.331	9.95	0.998	16.5	1.4004	1
141.	<i>Limanda limanda</i>	0.159	-0.799	400.00	2.602	5.0	0.0584	7
142.	<i>Lipolagus ochotensis</i>	0.989	-0.005	3.40	0.531	10.0	0.4668	1
143.	<i>Lipophrys pholis</i>	0.549	-0.260	20.20	1.305	16.0	0.3501	109
144.	<i>Liza dumerili</i>	0.387	-0.412	42.50	1.628	18.0	0.2723	45
145.	<i>Liza macrolepis</i>	0.478	-0.321	8.00	0.903	29.0	0.5835	59
146.	<i>Liza richardsonii</i>	0.915	-0.039	39.20	1.593	13.0	0.5018	22
147.	<i>Lota lota</i>	0.572	-0.243	213.00	2.328	11.3	0.2879	1
148.	<i>Lutjanus campechanus</i>	0.469	-0.329	365.50	2.563	15.0	0.2840	18
149.	<i>Lycodichthys dearborni</i>	0.117	-0.932	44.61	1.649	-1.5	0.0311	16
150.	<i>Macrogathus aculeatus</i>	0.233	-0.633	53.00	1.724	21.0	0.1906	43
151.	<i>Melamphaes acanthomus</i>	0.191	-0.719	17.40	1.241	5.0	0.0700	2
152.	<i>Melanocetus johnsonii</i>	0.288	-0.541	50.55	1.704	2.5	0.0934	1
153.	<i>Melanogrammus aeglefinus</i>	0.280	-0.553	155.90	2.193	10.0	0.1323	12
154.	<i>Melanonus zugmayeri</i>	0.265	-0.577	31.50	1.498	5.0	0.0973	1
155.	<i>Melanostigma gelatinosum</i>	0.403	-0.395	47.20	1.674	0.25	0.1167	1
156.	<i>Melanostigma pammelas</i>	0.117	-0.932	10.00	1.000	3.0	0.0389	8
157.	<i>Micropterus salmoides</i>	0.122	-0.914	178.00	2.250	15.0	0.0739	84
158.	<i>Microstomus kitt</i>	0.307	-0.513	229.00	2.360	5.0	0.1128	6
159.	<i>Misgurnus fossilis</i>	0.679	-0.168	28.50	1.455	18.0	0.4785	1
160.	<i>Monopterus cuchia</i>	0.113	-0.947	172.88	2.238	25.0	0.1128	10
161.	<i>Mugil cephalus</i>	0.342	-0.466	221.00	2.344	14.5	0.2023	72
162.	<i>Mugil curema</i>	0.500	-0.301	140.00	2.146	20.0	0.3890	12
163.	<i>Myoxocephalus octodecemspinosus</i>	0.330	-0.481	200.00	2.301	10.0	0.1556	16
164.	<i>Myoxocephalus scorpius</i>	0.519	-0.285	87.50	1.942	2.4	0.1673	5
165.	<i>Mystus armatus</i>	0.469	-0.329	9.20	0.964	30.0	0.6030	10
166.	<i>Mystus cavasius</i>	0.576	-0.240	45.00	1.653	29.0	0.7041	17
167.	<i>Mystus gulio</i>	0.549	-0.260	12.00	1.079	27.0	0.6068	2
168.	<i>Mystus vittatus</i>	0.545	-0.264	7.40	0.869	20.0	0.4240	60
169.	<i>Myxine glutinosa</i>	0.460	-0.337	38.40	1.584	7.0	0.1867	2
170.	<i>Nannobranchium regale</i>	0.169	-0.772	2.90	0.462	5.0	0.0622	1
171.	<i>Nannobranchium ritteri</i>	0.625	-0.204	1.80	0.255	5.0	0.2295	2
172.	<i>Naukrates ductor</i>	8.888	0.949	0.07	-1.155	23.0	8.0406	50
173.	<i>Notothenia coriiceps</i>	0.390	-0.409	1000.00	3.000	0.25	0.1128	3
174.	<i>Notothenia cyanobranca</i>	1.194	0.077	200.00	2.301	4.5	0.4279	1
175.	<i>Notothenia rossii</i>	0.304	-0.517	159.70	2.203	3.0	0.1011	12
176.	<i>Oligolepis acutipennis</i>	0.115	-0.939	6.30	0.799	26.0	0.1206	12

177.	<i>Oncorhynchus mykiss</i>	0.413	-0.384	450.00	2.653	5.0	0.1517	548
178.	<i>Oncorhynchus nerka</i>	0.434	-0.363	36.70	1.565	5.0	0.1595	87
179.	<i>Oncorhynchus tshawytscha</i>	1.050	0.021	26.00	1.415	16.0	0.6691	1
180.	<i>Oneirodes acanthias</i>	0.127	-0.896	4.20	0.623	5.0	0.0467	1
181.	<i>Ophiodon elongatus</i>	0.186	-0.730	1591.00	3.202	12.1	0.0973	16
182.	<i>Opsanus tau</i>	1.999	0.301	325.00	2.512	20.0	1.5560	1
183.	<i>Oreochromis aureus</i>	0.244	-0.613	697.00	2.843	26.0	0.2567	6
184.	<i>Oreochromis mossambicus</i>	0.226	-0.646	144.30	2.159	16.0	0.1439	206
185.	<i>Oreochromis niloticus niloticus</i>	0.211	-0.676	310.00	2.491	26.0	0.2217	50
186.	<i>Orthodon microlepidotus</i>	0.239	-0.622	650.00	2.813	12.0	0.1245	22
187.	<i>Oryzias latipes</i>	0.720	-0.143	0.27	-0.569	25.0	0.7197	59
188.	<i>Osphronemus goramy</i>	0.298	-0.526	12.50	1.097	28.0	0.3462	2
189.	<i>Pagetopsis macropterus</i>	0.327	-0.485	76.00	1.881	0.0	0.0934	1
190.	<i>Pagothenia borchgrevinki</i>	0.398	-0.400	90.15	1.955	0.5	0.1167	2
191.	<i>Paranotothenia magellanica</i>	0.983	-0.007	200.00	2.301	5.25	0.3657	2
192.	<i>Parophrys vetulus</i>	0.642	-0.192	70.00	1.845	15.0	0.3890	1
193.	<i>Parvilux ingens</i>	0.191	-0.719	9.40	0.973	5.0	0.0700	1
194.	<i>Perca fluviatilis</i>	0.140	-0.854	11.00	1.041	16.0	0.0895	17
195.	<i>Petromyzon marinus</i>	0.561	-0.251	22.80	1.358	5.0	0.2062	7
196.	<i>Pimephales promelas</i>	0.732	-0.135	2.00	0.301	15.0	0.4435	9
197.	<i>Platichthys flesus</i>	0.104	-0.983	350.00	2.544	9.0	0.0467	11
198.	<i>Platichthys stellatus</i>	0.139	-0.857	1290.00	3.111	9.0	0.0622	23
199.	<i>Plecoglossus altivelis altivelis</i>	4.208	0.624	10.70	1.029	19.0	3.1159	1
200.	<i>Pleuronectes platessa</i>	0.212	-0.674	288.60	2.460	5.0	0.0778	104
201.	<i>Poecilia latipinna</i>	0.132	-0.879	5.60	0.748	25.0	0.1323	14
202.	<i>Pollachius pollachius</i>	1.293	0.112	870.00	2.940	18.5	0.9336	2
203.	<i>Pomadasys commersonii</i>	0.289	-0.539	2627.00	3.419	15.0	0.1751	30
204.	<i>Pomoxis annularis</i>	0.518	-0.286	11.50	1.061	17.4	0.3540	1
205.	<i>Poromitra crassiceps</i>	0.169	-0.772	17.10	1.233	5.0	0.0622	2
206.	<i>Protopterus annectens annectens</i>	0.242	-0.616	368.00	2.566	30.0	0.3112	19
207.	<i>Psenes whiteleggii</i>	4.497	0.653	1.30	0.114	13.5	2.5285	1
208.	<i>Psetta maxima</i>	0.732	-0.135	320.00	2.505	15.0	0.4435	31
209.	<i>Pseudobathylagus milleri</i>	0.169	-0.772	41.10	1.614	5.0	0.0622	1
210.	<i>Pseudochaenichthys georgianus</i>	0.531	-0.275	35.70	1.553	0.5	0.1556	2
211.	<i>Pseudopleuronectes americanus</i>	0.030	-1.523	26.15	1.417	12.0	0.0156	68
212.	<i>Pterophyllum scalare</i>	0.307	-0.513	19.03	1.279	25.0	0.3073	31
213.	<i>Rhinogobiops nicholsii</i>	0.199	-0.701	4.04	0.606	15.0	0.1206	21
214.	<i>Rhodeus amarus</i>	1.184	0.073	0.71	-0.149	16.0	0.7547	1
215.	<i>Rhodeus sericeus</i>	1.365	0.135	3.00	0.477	12.0	0.7119	3
216.	<i>Rutilus rutilus</i>	0.684	-0.165	27.00	1.431	8.0	0.2918	11
217.	<i>Sagamichthys abei</i>	0.244	-0.613	5.70	0.756	5.0	0.0895	1
218.	<i>Salmo salar</i>	0.556	-0.255	25.00	1.398	7.0	0.2256	48
219.	<i>Salmo trutta fario</i>	0.478	-0.321	350.00	2.544	10.0	0.2256	8
220.	<i>Salmo trutta trutta</i>	0.363	-0.440	575.00	2.760	10.0	0.1712	52
221.	<i>Salvelinus alpinus alpinus</i>	0.513	-0.290	210.00	2.322	15.0	0.3112	2
222.	<i>Salvelinus fontinalis</i>	0.181	-0.742	690.00	2.839	10.0	0.0856	147
223.	<i>Salvelinus namaycush</i>	0.197	-0.706	82.80	1.918	9.2	0.0895	117
224.	<i>Sander lucioperca</i>	0.318	-0.498	600.00	2.778	5.0	0.1167	8
225.	<i>Sander vitreus</i>	0.325	-0.488	291.00	2.464	20.0	0.2529	35
226.	<i>Sarda chiliensis lineolata</i>	7.794	0.892	2530.00	3.403	22.0	6.7064	1
227.	<i>Sarotherodon galilaeus galilaeus</i>	0.259	-0.587	283.00	2.452	26.0	0.2723	6
228.	<i>Scardinius erythrophthalmus</i>	1.084	0.035	53.00	1.724	20.0	0.8441	1
229.	<i>Scopelogadus tristis</i>	0.138	-0.860	49.80	1.697	5.0	0.0506	1
230.	<i>Scopelogadus mizolepis mizolepis</i>	0.212	-0.674	3.60	0.556	5.0	0.0778	1
231.	<i>Scophthalmus rhombus</i>	0.700	-0.155	145.00	2.161	18.5	0.5057	3
232.	<i>Scorpaena porcus</i>	0.330	-0.481	50.00	1.699	20.0	0.2567	3
233.	<i>Scyliorhinus canicula</i>	0.211	-0.676	857.00	2.933	7.0	0.0856	25
234.	<i>Scyliorhinus stellaris</i>	0.022	-1.658	2530.00	3.403	18.3	0.0156	14
235.	<i>Sebastes diploproa</i>	0.965	-0.015	2.00	0.301	10.0	0.4551	19
236.	<i>Sebastolobus altivelis</i>	0.041	-1.387	198.00	2.297	5.7	0.0156	6
237.	<i>Seriola quinqueradiata</i>	0.770	-0.114	989.00	2.995	19.2	0.5757	1
238.	<i>Serranus scriba</i>	1.013	0.006	4.10	0.613	16.0	0.6457	1
239.	<i>Solea solea</i>	0.709	-0.149	185.00	2.267	14.0	0.4085	6
240.	<i>Sparus aurata</i>	1.121	0.050	78.00	1.892	18.0	0.7897	2
241.	<i>Spinachia spinachia</i>	1.955	0.291	0.30	-0.523	18.0	1.3771	2
242.	<i>Squalus acanthias</i>	0.182	-0.740	1812.00	3.258	9.0	0.0817	23
243.	<i>Stenobranchius leucopsarus</i>	0.635	-0.197	4.30	0.633	5.0	0.2334	2
244.	<i>Stomias atriventer</i>	0.478	-0.321	9.30	0.968	10.0	0.2256	1
245.	<i>Stomias danae</i>	0.504	-0.298	13.80	1.140	2.5	0.1634	1
246.	<i>Symbolophorus californiensis</i>	0.911	-0.040	0.80	-0.097	5.0	0.3345	1
247.	<i>Synbranchus marmoratus</i>	0.140	-0.854	151.00	2.179	25.0	0.1400	18
248.	<i>Syngnathus acus</i>	1.045	0.019	7.60	0.881	18.5	0.7547	2
249.	<i>Tarletonbeania crenularis</i>	1.248	0.096	3.29	0.517	8.0	0.5329	2
250.	<i>Tautoglabrus adspersus</i>	0.710	-0.149	50.00	1.699	20.0	0.5524	2
251.	<i>Theragra chalcogramma</i>	0.427	-0.370	70.00	1.845	1.0	0.1284	23
252.	<i>Thorichthys meeki</i>	0.319	-0.496	15.00	1.176	25.0	0.3190	2
253.	<i>Thymallus arcticus arcticus</i>	0.757	-0.121	283.00	2.452	4.0	0.2645	16
254.	<i>Tilapia rendalli</i>	0.488	-0.312	50.00	1.699	17.0	0.3268	7
255.	<i>Tilapia zillii</i>	0.218	-0.662	315.00	2.498	26.0	0.2295	30

256.	<i>Tinca tinca</i>	0.379	-0.421	541.00	2.733	16.0	0.2412	21
257.	<i>Torpedo marmorata</i>	0.134	-0.873	448.00	2.651	16.0	0.0856	3
258.	<i>Torpedo torpedo</i>	0.417	-0.380	315.00	2.498	15.0	0.2529	2
259.	<i>Trematomus bernacchii</i>	0.176	-0.754	55.20	1.742	0.1	0.0506	2
260.	<i>Trematomus hansonii</i>	0.939	-0.027	145.00	2.161	-0.9	0.2567	1
261.	<i>Trematomus pennellii</i>	0.626	-0.203	183.00	2.262	-0.9	0.1712	1
262.	<i>Trichogaster trichopterus</i>	0.588	-0.231	7.97	0.901	27.0	0.6496	3
263.	<i>Triphoturus mexicanus</i>	0.381	-0.419	1.15	0.061	5.0	0.1400	2
264.	<i>Typhlogobius californiensis</i>	0.013	-1.886	3.54	0.549	15.0	0.0078	34
265.	<i>Xiphophorus hellerii</i>	0.833	-0.079	2.00	0.301	25.0	0.8325	2
266.	<i>Zoarces viviparus</i>	0.763	-0.117	0.29	-0.538	5.0	0.2801	8
