|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Species | CFF | Mg | qWg | Brain Mass | Light levels |
| *Ambystoma tigrinums* | 30e,s,1 | 10.7828 | 0.0001628 | NA | L |
| *Anguilla anguilla* | 14b,s,2 | 71.128 | 0.0001328 | NA | L |
| *Anolis cristatellus* | 70e,o,3 | 6.029 | 0.0008929 | NA | H |
| *Asio flammeus* | 70e,o,4 | 406.030 | 0.003228 | 5.4569 | H |
| *Bubo virginianus* | 45e,s,5 | 1450.031 | 0.003628 | 13.770 | L |
| *Canis lupus familiaris* | 80b,s,6 | 13900.032 | 0.0018328 | 80.071 | H |
| *Carassius auratus* | 67.2e,o,7 | 10.833 | 0.0001328 | 0.0171 | H |
| *Carcharhinus acronotus* | 18e,o,8 | 14491.08 | 0.0011456\* | NA | L |
| *Caretta caretta* | 40e,s,9 | 135000.034 | 0.0000857 | 2.740 | H |
| *Cavia porcellus* | 50e,s,10 | 629.035 | 0.0030635 | 3.872 | L |
| *Chelonia mydas* | 40e,s,9 | 128000.036 | 0.0002536 | 8.671 | H |
| *Columba livia* | 100e,s,4 | 315.037 | 0.004528 | 2.370 | H |
| *Dermochelys coriacea* | 15e,s,11 | 354000.038 | 0.0004358 | 30.073 | H |
| *Felis catus* | 55e,s,12 | 3054.432 | 0.0039459 | 28.471 | L |
| *Gallus gallus domesticus* | 87b,o,13 | 2710.039 | 0.002228 | 3.674 | H |
| *Gekko gecko* | 20e,s,14 | 54.840 | 0.0003428 | 0.275 | L |
| *Homo sapiens* | 60b,o,15 | 67100.041 | 0.0011760 | 1300.076 | H |
| *Iguana iguana* | 80e,s,14 | 750.042 | 0.0002928 | 0.6175 | H |
| *Macaca mulatta* | 95b,o,16 | 7710.043 | 0.0020561 | 91.771 | H |
| *Melopsittacus undulatus* | 74.7b,s,17 | 33.628 | 0.0120428 | 1.570 | H |
| *Negaprion brevirostris* | 37e,s,18 | 92987.044 | 0.0005362\* | NA | L |
| *Oncorhynchus mykiss* | 27b,s,19 | 4000.045 | 0.0004128 | 0.571 | L |
| *Oryzias latipes* | 37.2e,s,20 | 0.2120 | 0.0007228 | 0.0177 | L |
| *Pagophilus groenlandicus* | 32.7b,s,12 | 119600.046 | 0.0021163 | 228.578 | L |
| *Raja erinacea* | 30e,o,22 | 500.047 | 0.0002447 | 2.3271 | L |
| *Rattus norvegicus* | 39e,o,23 | 237.048 | 0.0067948 | 2.379 | L |
| *Spermophilus lateralis* | 120e,o,10 | 215.549 | 0.0033564 | 3.680 | H |
| *Sphenodon punctatus* | 45.6b,s,24 | 353.7550 | 0.0001728 | NA | L |
| *Sphyrna lewini* | 27.3e,o,8 | 1893.08, 51 | 0.001065\* | 60.077 | L |
| *Sturnus vulgaris* | 100e,s,25 | 75.028 | 0.01228 | 1.974 | H |
| *Tamias amoenus* | 100e,o,10 | 51.9152 | 0.0093766 | 1.9880 | H |
| *Tamiasciurus hudsonicus* | 60e,o,10 | 21535 | 0.0073567 | 4.080 | H |
| *Thunnus albacares* | 80e,s,26 | 45349.053, 54 | 0.0015868\* | 6.2477 | H |
| *Tupaia glis* | 90b,o,27 | 142.055 | 0.0042455 | 3.479 | H |

\* Indicates species with qWg estimated from swimming speeds extrapolated to zero (see Methods in main text). CFF = Critical flicker fusion (CFF), Mg = body mass (grams), qWg = Temperature corrected (25°C) mass specific resting metabolic rate (Wg-1), Light levels, H= High, L = Low. NA = No data available for species. Superscript indicates type of measurement, e = electroretinogram, b = behavioural experiments, o = optimum methodology, s = suboptimum methodology and numbers refer to data references; (1) Crevier & Meister (1998); (2) Adrian & Matthews (1926); (3) Fleishman et al. (1995); (4) Bornshein & Tansley (1961); (5) Ault & House (1987); (6) Coile et al. (1989); (7) Hanyu & Ali (1963); (8) McComb et al. (2010); (9) Levenson et al. (2004); (10) Tansley et al. (1961); (11) Eckert et al. (2006); (12) Loop & Berkeley (1975); (13) Lisney et al. (2011); (14) Meneghini & Hamasaki (1967); (15) Brundrett (1974); (16) Shumake et al. (1968); (17) Ginsburg & Nilsson (1971); (18) Gruber (1969); (19) Carvalho et al. (2004); (20) Carvalho et al. (2002); (21) Bernholz & Matthews (1975); (22) Green & Siegel (1975); (23) Williams et al. (1985); (24) Woo et al. (2009);(25) Greenwood et al. (2004); (26) Southwood et al. (2008); (27) Callahan & Petry (1999); (28) Makarieva et al. (2008); (29) Rogowitz (1996); (30) Graber (1962); (31) Ganey et al. (1993); (32) Kendall et al. (1982); (33) Hughes et al. (1977); (34) Duermit (2007); (35) Arends & McNab (2001); (36) Jackson & Prange (1979); (37) Terres (1980); (38) Georges & Fossette (2006); (39) Winchester (1940); (40) Hurlburt (1996); (41) Holloway (1980); (42) Howland et al. (2004); (43) Schwartz & Kemnitz (1992); (44) Allyn (1947); (45) Ridolfi (2006); (46) Stewart & and Lavigne (1984); (47) Hove & Moss (1997); (48) Hart (1971); (49) McKeever (1964); (50) Herrel et al. (2010); (51) Letourneur et al. (1998); (52) Sheppard (1968); (53) Collette & Nauen (1983); (54) Duarte-Neto & Lessa (2004); (55) Bradley & Hudson (2003); (56) Carlson (1999); (57) Lutz et al. (1989). (58) Paladino et al. (1996); (59) Eisenberg (1981); (60) Elgar & Harvey (1987); (61) Bruhn (1934); (62) Bushnell et al. (1989); (63) McNab (1986); (64) Hudson et al. (1972); (65) Lowe (2001); (66) Jones & Wang (1976); (67) Pauls (1981); (68) Dewar & Graham (1994); (69) Garamszegi et al. (2002); (70) Iwaniuk & Nelson (2002); (71)