

Table S1. Size and swimming speed of a variety of fish species

Species	Total length or fork length (cm)	Swimming speed (cm s ⁻¹)	Swimming speed (BL s ⁻¹)	Reference	
Elasmobranchs					
<i>Sphyrna lewini</i>	52	47.6	0.91	Lowe (1996)	
	59	56.2	0.95	Lowe (1996)	
	52	56.6	1.09	Lowe (1996)	
	53	57.5	1.26	Lowe (1996)	
	60	83.1	1.07	Lowe (1996)	
	54	63.2	1.38	Lowe (1996)	
	56	73.7	1.16	Lowe (1996)	
	58	57.4	1.31	Lowe (1996)	
	58	56.8	0.99	Lowe (1996)	
	54	76.8	0.98	Lowe (1996)	
	52	80	1.42	Lowe (1996)	
	64	18	1.55	Lowe (1998)	
	38	18	0.47	Holland et al. (1993)	
	<i>Triakis semifasciata</i>	35	65	1.86	Graham et al. (1990)
		36	54.5	1.56	Graham et al. (1990)
		36	46.8	1.3	Graham et al. (1990)
38		43.2	1.14	Graham et al. (1990)	
38		57.8	1.52	Graham et al. (1990)	
39		48.4	1.24	Graham et al. (1990)	
47		49.6	1.06	Graham et al. (1990)	
52		90.5	1.74	Graham et al. (1990)	
56		90.2	1.61	Graham et al. (1990)	
58		96.9	1.67	Graham et al. (1990)	
68		96.3	1.42	Graham et al. (1990)	
71		49.9	0.7	Graham et al. (1990)	
71		69.2	0.98	Graham et al. (1990)	
71		89.3	1.26	Graham et al. (1990)	
77		89	1.16	Graham et al. (1990)	
<i>Isurus oxyrinchus</i>	103	89.3	0.87	Graham et al. (1990)	
	110	65.9	0.6	Graham et al. (1990)	
	121	76.4	0.63	Graham et al. (1990)	
	91	14	0.15	Ackerman et al. (2000)	
	115	72.2	0.63	Sepulveda et al. (2004)	
	115 FL	55.6	0.48	Sepulveda et al. (2004)	
	120 FL	66.7	0.56	Sepulveda et al. (2004)	
	125 FL	41.7	0.33	Sepulveda et al. (2004)	
	83 FL	59.7	0.72	Sepulveda et al. (2004)	
	145 FL	88.9	0.61	Sepulveda et al. (2004)	
	80 FL	44.4	0.56	Sepulveda et al. (2004)	
	119	90	0.8	Klimley et al. (2002)	
	142	120	0.8	Klimley et al. (2002)	
	135	70	0.5	Klimley et al. (2002)	
	136	67	0.49	Carey et al. (1981)	
170	31	0.18	Holts & Bedford (1993)		
<i>Carcharodon carcharius</i>	500	74	0.148	Gunn et al. (1999)	
	152	80	0.53	Klimley et al. (2001)	
	300	89	0.29	Strong et al. (1992)	
	500	89	0.18	Strong et al. (1992)	
	460	89	0.19	Carey et al. (1982)	
<i>Prionace glauca</i>	370	64	0.17	Goldman & Anderson (1999)	
	150	60	0.4	Klimley et al. (2002)	
	150	30	0.2	Klimley et al. (2001)	
	260	42	0.16	Sciarotta & Nelson (1977)	
<i>Negaprion brevirostris</i>	200	42	0.21	Carey et al. (1990)	
	70	76.4	1.09	Graham et al. (1990)	
	150	53	0.35	Gruber et al. (1988)	
<i>Carcharhinus</i>	180	33	0.18	Sundstom et al. (2001)	
	<i>amblyrhyncos</i>	130	69	0.53	Mckibben & Nelson (1986)
	<i>obscurus</i>	65	22	0.34	Huish & Benedict (1978)
	<i>plumbeus</i>	71	34	0.48	Medved & Marshall (1983)
	<i>acus</i>	120	23.5	0.19	Yano Tanaka (1986)
	<i>galeocerdo cuvier</i>	420	107	0.25	Holland et al. (1999)
		400	100	0.25	Tricas et al. (1981)
	<i>hexanchus griseus</i>	380	20	0.05	Carey & Clark (1995)
	Bony fishes				
	<i>Thunnus albacares</i>	28	52	1.85	Blake et al. (2005)
28		52	1.85	Blake et al. (2005)	
28		56	2	Blake et al. (2005)	
31		60	1.93	Blake et al. (2005)	
31		61	1.96	Blake et al. (2005)	
35		67	1.91	Blake et al. (2005)	
<i>Thunnus orientalis</i>	76	76	1	Blank et al. (2007)	

<i>Thunnus obesus</i>	36	49	1.36	Blake et al. (2005)
	55	60	1.09	Blake et al. (2005)
	36	76	2.11	Blake et al. (2005)
<i>Auxis rochei</i>	31	68	2.19	Blake et al. (2005)
<i>Katsuwonus pelamis</i>	39	84	2.15	Blake et al. (2005)
	38	59	1.55	Blake et al. (2005)
	51	51	1	Blake et al. (2005)
	38	57	1.5	Blake et al. (2005)
	48	72	1.5	Blake et al. (2005)
<i>Eutynnus affinis</i>	60	186	3.1	Blake et al. (2005)
	26	30	1.15	Blake et al. (2005)
	26	40	1.54	Blake et al. (2005)
	38	51.6	1.36	Blake et al. (2005)
<i>Megalops cyprinoides</i>	26.2	17.03	0.65	Seymore et al. (2007)
<i>Gadus morhua</i>	46.5	20	0.43	Dutil et al. (2007)
<i>Catostomus commersonii</i>	39.3	93.53	2.38	Castro-Santos (2005)
<i>Morone saxatilis</i>	51.6	132	2.56	Castro-Santos (2005)
<i>Stizostedion vitreum</i>	31.9	77.84	2.44	Castro-Santos (2005)
<i>Pollachius virens</i>	25	93	3.72	Pederson (2001)
<i>Gomphosus varius</i>	12.4	15	1.21	Westneat & Walker (1997)
subadult <i>Acipenser medirostris</i>	104	80	0.77	Kelly et al. (2007)
Filter feeders (including elasmobranchs)				
<i>Megachasma pelagios</i>	490	32	0.07	Nelson et al. (1997)
<i>Rhincodon typus</i>	400	32.8	0.082	Hsu Hsun (2007)
<i>Rhincodon typus</i>	450	40	0.09	Hsu Hsun (2007)
<i>Cetorhinus maximus</i>	1000	85	0.09	Sims (2000)
<i>Cetorhinus maximus</i>	700	45	0.06	Priede (1984)
<i>Cyprius carpio</i>	5.31	38	7.16	Tudorache et al. (2007)
<i>Cyprius carpio</i>	10	45	4.5	Tudorache et al. (2007)
<i>Cyprius carpio</i>	19.8	45	2.27	Tudorache et al. (2007)
<i>Cyprius carpio</i>	26.2	45	1.72	Tudorache et al. (2007)
<i>Anchoa spp</i>	5	53	7.3	Taylor et al. (2007)
<i>Menidia menidia</i>	63	66	1.05	Hartwell & Otto (1991)
<i>Mallotus villosus</i>	18.5	18.5	1	Behrens et al. (2006)
<i>Alosa sapidissima</i>	42.8	43.22	1.01	Leonard et al. (1999)
<i>Alosa sapidissima</i>	40.1	45.714	1.14	Leonard et al. (1999)
<i>Alosa sapidissima</i>	41.775	41.775	1	Castro-Santos (2005)
Freshwater fish				
<i>Siluris glanis</i>	9.2	1.56	0.17	Zamora & Garcia-Berthou (2007)

BL, body lengths.

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