

Supplement 1: Length-weight equations used to determine individual fish biomass for fish species caught in the early period (1977-1989). N = number of individuals used to determine the length-weight relationship for each species.

Species	Length-weight equation	n	Source	Study area and Notes
<i>Alepocephalus agassizii</i>	$TW(g) = 0.0035 \times (SLcm)^{3.2914}$	11	PSB trawl data	NE Atlantic
<i>Alepocephalus australis</i>	$TW(g) = 0.003 \times (SLcm)^{3.3582}$	3	John Gordon	NE Atlantic
<i>Alepocephalus bairdii</i>	$TW(g) = 0.0055 \times (SLcm)^{3.1403}$	38	PSB trawl data	NE Atlantic
<i>Alepocephalus productus</i>	$TW(g) = 0.0047 \times (SLcm)^{3.2293}$	5	PSB trawl data	NE Atlantic
<i>Alepocephalus rostratus</i>	$TW(g) = 0.0037 \times (SLcm)^{3.3155}$	35	PSB trawl data	NE Atlantic
<i>Antimora rostrata</i>	$TW(g) = 0.0015 \times (SLcm)^{3.4912}$	244	PSB trawl data	NE Atlantic
<i>Aphanopus carbo</i>	$TW(g) = 0.00003 \times (SLcm)^{3.8474}$	15	PSB trawl data	NE Atlantic
<i>Argentina silus</i>	$TW(g) = 0.0055 \times (SLcm)^{3.2242}$	421	Gordon & Hunter 1994	NE Atlantic
<i>Argentina sphyraena</i>	$TW(g) = 0.0053 \times (TLcm)^{3.053}$	157	Coull et al. 1989	NE Atlantic, $TL(cm) = 1.1027 \times (SLcm) + 0.2154$
<i>Bathypterois dubius</i> <i>Bathypterois longipes</i>	$TW(g) = 0.0074 \times (SLcm)^{2.982}$	123	PSB trawl data	<i>Bathypterois dubius</i> data, NE Atlantic
<i>Bathyraja richardsoni</i>	$TW(g) = 0.0081 \times (TLcm)^{2.9441}$	3	PSB trawl data	NE Atlantic
<i>Bathysaurus ferox</i>	$TW(g) = 0.0006 \times (SLcm)^{3.6252}$	21	PSB trawl data	NE Atlantic
<i>Bathysaurus mollis</i>	$TW(g) = 0.0009 \times (SLcm)^{3.5055}$	4	PSB trawl data	NE Atlantic

<i>Bathytroctes microlepis</i>	$TW(g) = 0.0156 \times (SLcm)^{2.8664}$	17	PSB trawl data	NE Atlantic
<i>Bathytroctes macrolepis</i>	$TW(g) = 0.0032 \times (SLcm)^{3.3948}$	11	PSB trawl data	NE Atlantic
<i>Bathytroctes michaelsarsi</i>	$TW(g) = 0.0165 \times (TLcm)^{2.8148}$	3	PSB trawl data	NE Atlantic
<i>Beryx decadactylus</i>	$TW(g) = 0.027 \times (FLcm)^{2.9738}$	NA	John Gordon	NE Atlantic
<i>Caelorinchus caelorhincus</i>	$TW(g) = 0.00219 \times (TLcm)^{3.106}$	25	Borges et al. 2003	S Portugal $TL(cm)=4.3706 \times (HLcm) + 1.1642$
<i>Caelorinchus labiatus</i>	$TW(g) = 0.145 \times (HLcm)^{3.0234}$	84	PSB trawl data	NE Atlantic
<i>Cataetyx laticeps</i> <i>Cataetyx alleni</i>	$TW(g) = 0.0045 \times (SLcm)^{3.1049}$	22	PSB trawl data	used <i>Cataetyx laticeps</i> data, NE Atlantic
<i>Centrophorus squamosus</i>	$TW(g) = 0.00007* \times (TLcm)^{3.9318}$	NA	John Gordon	NE Atlantic
<i>Centroscymnus coelolepis</i>	$TW(g) = 0.0043 \times (TLcm)^{3.1204}$	227	Gordon & Hunter 1994	NE Atlantic
<i>Chimaera monstrosa</i>	$TW(g) = 0.00014 \times (TLcm)^{3.475}$	22	Borges et al. 2003	S Portugal
<i>Conocara macropterum</i>	$TW(g) = 0.0022 \times (SLcm)^{3.3882}$	25	PSB trawl data	NE Atlantic
<i>Conocara murrayi</i>	$TW(g) = 0.0022 \times (SLcm)^{3.4581}$	23	PSB trawl data	NE Atlantic
<i>Conocara salmoneum</i>	$TW(g) = 0.0025 \times (SLcm)^{3.486}$	7	PSB trawl data	NE Atlantic
<i>Coryphaenoides armatus</i>	$TW(g) = 0.2926 \times (HLcm)^{3.4506}$	761	PSB trawl data	NE Atlantic
<i>Coryphaenoides brevibarbis</i>	$TW(g) = 0.4336 \times (HLcm)^{2.8262}$	69	PSB trawl data	NE Atlantic

<i>Coryphaenoides carapinus</i>	$TW(g) = 0.1734 \times (HLcm)^{3.6864}$	39	PSB trawl data	NE Atlantic
<i>Coryphaenoides guentheri</i>	$TW(g) = 0.8921 \times (HLcm)^{2.5784}$	1023	PSB trawl data	NE Atlantic
<i>Coryphaenoides leptolepis</i>	$TW(g) = 0.2947 \times (HLcm)^{3.1591}$	185	PSB trawl data	NE Atlantic
<i>Coryphaenoides mediterraneus</i>	$TW(g) = 0.4966 \times (HLcm)^{3.0369}$	60	PSB trawl data	NE Atlantic
<i>Coryphaenoides profundicolus</i>	$TW(g) = 0.2155 \times (HLcm)^{3.383}$	17	PSB trawl data	NE Atlantic
<i>Coryphaenoides rupestris</i>	$TW(g) = 0.231 \times (HLcm)^{3.2892}$	342	PSB trawl data	NE Atlantic
<i>Cottunculus thomsonii</i>	$TW(g) = 0.0156 \times (SLcm)^{3.0806}$	12	PSB trawl data	NE Atlantic
<i>Dalatias licha</i>	$TW(g) = 0.0008 \times (TLcm)^{3.433}$	30	John Gordon	NE Atlantic
<i>Deania calcea</i>	$TW(g) = 0.0012 \times (TLcm)^{3.2623}$	494	Gordon & Hunter 1994	NE Atlantic
<i>Dipturus nidarosiensis</i>	$TW(g) = 0.0108 \times (DWcm)^{3.079}$	NA	Coull et al. 1989	used <i>Dipturus batis</i> , NE Atlantic, DW (cm) = TL(cm) / 1.424
<i>Echiodon drummondii</i>	$TW(g) = 0.00059 \times (TLcm)^3$	NA	Pauly et al. 1998	NE Atlantic
<i>Epigonus telescopus</i>	$TW(g) = 0.0111 \times (SLcm)^{3.1601}$	10	PSB trawl data	NE Atlantic
<i>Etmopterus princeps</i>	$TW(g) = 0.0028 \times (TLcm)^{3.1476}$	30	Gordon & Hunter 1994	NE Atlantic
<i>Etmopterus spinax</i>	$TW(g) = 0.0018 \times (TLcm)^{3.2430}$	198	Gordon & Hunter 1994	NE Atlantic
<i>Gaidropsarus macrophthalmus macrophthalmus</i>	$TW(g) = 0.0041 \times (SLcm)^{3.2879}$	4	PSB trawl data	NE Atlantic

<i>Gaidropsarus argentatus</i>	$TW(g) = 0.0065 \times (SLcm)^{3.279}$	NA	John Gordon	NE Atlantic
<i>Galeus melastomus</i>	$TW(g) = 0.00166 \times (TLcm)^{3.145}$	311	Borges et al. 2003	S Portugal
<i>Galeus murinus</i>	$TW(g) = 0.0048 \times (SLcm)^{3.5928}$	NA	John Gordon	NE Atlantic
<i>Glyptocephalus cynoglossus</i>	$TW(g) = 0.0017 \times (TLcm)^{3.39}$	571	Coull et al. 1989	NE Atlantic
<i>Guttigadus latifrons</i>	$TW(g) = 0.0103 \times (SLcm)^{2.8844}$	15	PSB trawl data	NE used <i>Halargyreus johnsonii</i> , NE Atlantic
<i>Halargyreus johnsonii</i>	$TW(g) = 0.0103 \times (SLcm)^{2.8844}$	15	PSB trawl data	NE Atlantic
<i>Halosauropsis macrochir</i>	$TW(g) = 0.0138 \times (GPLcm)^{3.033}$	34	PSB trawl data	NE Atlantic
<i>Halosaurus johnsonianus</i>	$TW(g) = 0.0138 \times (GPLcm)^{3.033}$	34	PSB trawl data	used <i>Halosauropsis macrochir</i> , NE Atlantic
<i>Harriotta raleighana</i>	$TW(g) = 0.0007 \times (TLcm)^{3.38}$	NA	John Gordon	NE Atlantic
<i>Helicolenus dactylopterus dactylopterus</i>	$TW(g) = 0.0128 \times (SLcm)^{3.2604}$	6	PSB trawl data	NE Atlantic
<i>Histiobranchus bathybius</i>	$TW(g) = 0.0002 \times (TLcm)^{3.4447}$	55	PSB trawl data	NE Atlantic
<i>Hoplostethus atlanticus</i>	$TW(g) = 0.00735 \times (SLcm)^{2.7759}$	10	PSB trawl data	NE Atlantic
<i>Hoplostethus mediterraneus mediterraneus</i>	$TW(g) = 0.0417 \times (SLcm)^{2.9121}$	10	PSB trawl data	NE Atlantic
<i>Hydrolagus affinis</i>	$TW(g) = 0.0043 \times (TLcm)^{3.08}$	NA	John Gordon	NE Atlantic

<i>Hydrolagus mirabilis</i>	$TW(g) = 0.0152 \times (TLcm)^{2.2802}$	10	PSB trawl data	NE Atlantic
<i>Ilyophis arx</i>	$TW(g) = 0.000077 \times (SLcm)^{3.6349}$	297	Gordon & Duncan 1987	used <i>Synaphobranchus kaupii</i> , NE Atlantic
<i>Ilyophis blachei</i>	$TW(g) = 0.000077 \times (SLcm)^{3.6349}$	297	Gordon & Duncan 1987	used <i>Synaphobranchus kaupii</i> , NE Atlantic
<i>Ilyophis brunneus</i>	$TW(g) = 0.000077 \times (SLcm)^{3.6349}$	297	Gordon & Duncan 1987	used <i>Synaphobranchus kaupii</i> , NE Atlantic
<i>Lepidion eques</i>	$TW(g) = 0.0026 \times (SLcm)^{3.2909}$	657	PSB trawl data	NE Atlantic
<i>Lepidorhombus boscii</i>	$TW(g) = 0.00349 \times (TLcm)^{3.219}$	7	Borges et al. 2003	S Portugal
<i>Lepidorhombus whiffiagonis</i>	$TW(g) = 0.0008 \times (SLcm)^{3.1109}$	31	John Gordon	NE Atlantic
<i>Leucoraja circularis</i>	$TW(g) = 0.0024 \times (TLcm)^{3.233}$	NA	Dorel 1986	NE Atlantic
<i>Lophius piscatorius</i>	$TW(g) = 0.0063 \times (TLcm)^{3.284}$	47	Borges et al. 2003	S Portugal
<i>Lycodes terraenovae</i>	$TW(g) = 0.00005 \times (TLcm)^{4.1968}$	4	John Gordon	NE Atlantic
<i>Merluccius merluccius</i>	$TW(g) = 0.0047 \times (SLcm)^{3.099}$	NA	John Gordon	NE Atlantic
<i>Microchirus variegatus</i>	$TW(g) = 0.0089 \times (TLcm)^{3.0790}$	5	Coull et al. 1989	NE Atlantic
<i>Molva dypterygia</i>	$TW(g) = 0.0015 \times (TLcm)^{3.228}$	240	Gordon & Hunter 1994	NE Atlantic
<i>Molva macrophthalmalma</i>	$TW(g) = 0.0009 \times (TLcm)^{3.24}$	NA	John Gordon	NE Atlantic
<i>Mora moro</i>	$TW(g) = 0.0013 \times (SLcm)^{3.6134}$	20	PSB trawl data	NE Atlantic

<i>Narctes stomias</i>	$TW(g) = 0.0072 \times (SLcm)^{3.0679}$	27	PSB trawl data	NE Atlantic
<i>Nezumia aequalis</i>	$TW(g) = 0.8878 \times (HLcm)^{2.7835}$	193	PSB trawl data	NE Atlantic
<i>Notacanthus bonaparte</i>	$TW(g) = 5E-5 \times (TLcm)^{3.9591}$	28	PSB trawl data	NE Atlantic
<i>Notacanthus chemnitzii</i>	$\ln(Wg) = 2.910 * \ln \times (GPLcm)^{-2.979}$	97	Coggan et al. 1998	NE Atlantic
<i>Pachycara crassiceps</i> <i>Pachycara bulbiceps</i>	$TW(g) = 0.0004 \times (TLcm)^{3.673}$	3	PSB trawl data	used <i>Pachycara crassiceps</i> , NE Atlantic
<i>Paraliparis hystrix</i>	$TW(g) = 0.0011 \times (SLcm)^{3.7392}$	12	John Gordon	NE Atlantic
<i>Phycis blennoides</i>	$TW(g) = 0.012 \times (SLcm)^{2.9543}$	8	PSB trawl data	NE Atlantic
<i>Polyacanthonotus challengerii</i>	$TW(g) = 0.0051 \times (GPLcm)^{3.7161}$	5	PSB trawl data	NE Atlantic
<i>Polyacanthonotus rissoanus</i>	$TW(g) = 0.0005 \times (TLcm)^{3.1395}$	77	PSB trawl data	NE Atlantic
<i>Pseudonezumia flagellicauda</i>	$TW(g) = 0.8878 \times (HLcm)^{2.7835}$	193	PSB trawl data	used <i>Nezumia aequalis</i> , NE Atlantic
<i>Rajella bigelowi</i>	$TW(g) = 0.0154 \times (TLcm)^{2.6517}$	5	PSB trawl data	NE Atlantic
<i>Rajella fyllae</i>	$TW(g) = 0.02 \times (TLcm)^{2.5963}$	3	PSB trawl data	NE Atlantic
<i>Rinoctes nasutus</i>	$TW(g) = 0.0137 \times (SLcm)^{2.8874}$	10	PSB trawl data	NE Atlantic
<i>Rouleina attrita</i>	$TW(g) = 0.0137 \times (SLcm)^{2.8874}$	22	John Gordon	NE Atlantic
<i>Scymnodon ringens</i>	$TW(g) = 0.0043 \times (TLcm)^{3.1286}$	62	Gordon & Hunter 1994	NE Atlantic

<i>Spectrunculus grandis</i>	$TW(g) = 0.0083 \times (SLcm)^{2.9416}$	101	PSB trawl data	NE Atlantic
<i>Synphobranchus kaupii</i>	$TW(g) = 9E-5 \times (TLcm)^{3.5584}$	1532	PSB trawl data	NE Atlantic
<i>Trachyrincus murrayi</i>	$TW(g) = 0.1503 \times (HLcm)^{2.9995}$	44	PSB trawl data	NE Atlantic
<i>Trachyrincus scabrus</i>	$TW(g) = 0.04444 \times (HLcm)^{3.525}$	10	PSB trawl data	NE Atlantic
<i>Trachyscorpia cristulata echinata</i>	$TW(g) = 0.0031 \times (SLcm)^{3.6574}$	4	PSB trawl data	NE Atlantic
<i>Venefica proboscidea</i>	$TW(g) = 0.0083 \times (SLcm)^{2.9416}$	1532	PSB trawl data	used <i>Synphobranchus kaupii</i> , NE Atlantic

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