

32. GROWTH: VERTEBRATES OTHER THAN MAMMALS

Part I. Birds

For information on organ weights of chickens, consult reference 3; for additional information on body weights of turkeys, consult reference 9.

	Species (Synonym)	Age wk	Weight, kg		Reference		Species (Synonym)	Age wk	Weight, kg		Reference	
			♂	♀					♂	♀		
1	<i>Anas platyrhynchos domesticus</i>	Hatched	0.054	0.054	4	39	<i>Coturnix coturnix japonica</i>	Hatched	0.0065	0.0067	15	
2		1	0.272	0.268		40		1	0.018	0.019		
3		2	0.781	0.740		41		2	0.040	0.042		
4		3	1.389	1.312		42		3	0.065	0.067		
5		4	1.870	1.771		43		4	0.087	0.090		
6		5	2.420	2.234		44		5	0.102	0.105		
7		6	2.928	2.688		45		6	0.109	0.131		
8		7	3.305	3.015		46		18	0.124	0.155		
9		8	3.582	3.264		47		Hatched	0.006			
10		12	3.904	3.632		48		1	0.018			
11		16	3.950	3.723		49		2	0.031			
12		20	3.995	3.768		50		3	0.048			
13		24	4.041	3.814		51		4	0.068			
14		28	4.086	3.859		52		5	0.083			
15	<i>Anser cygnoides</i>	1	0.227	0.227	2, 12	53	<i>Gallus gallus (G. domesticus)</i>	6	0.089		5	
16		2	0.477	0.422		54		7	0.105			
17		3	0.844	0.776		55		8	0.107			
18		4	1.403	1.253		56		9	0.111			
19		5	1.907	1.603		57		10	0.115			
20		6	2.429	2.225		58		13	0.120			
21		7	2.806	2.751		59		Cornish	Hatched	0.032		0.032
22		8	3.105	3.065		60			1	0.059		0.059
23		9	3.360	3.228		61			2	0.109		0.105
24		10	3.505	3.437		62			3	0.182		0.172
25		11	3.655	3.582		63			4	0.268		0.256
26		12	3.909	3.668		64			8	0.727		0.636
27		13	4.018	3.991		65			12	1.272		1.045
28		14	4.136	4.050		66			16	1.727		1.318
29	18	4.427	4.218	66	20	2.091	1.545					
30	<i>Colinus virginianus</i>	1		0.011	8	67	Cornish X White Rock ^{1/}		Hatched	0.036	0.036	14
31		2		0.025		68		1	0.107	0.105		
32		3		0.042		69		2	0.250	0.230		
33		4		0.061		70		3	0.460	0.410		
34		5		0.076		71		4	0.700	0.600		
35		6		0.094		72		5	0.960	0.810		
36		8		0.119		73		6	1.300	1.060		
37		10		0.148		74		7	1.670	1.340		
38	12		0.158	75								

^{1/} Broiler type.

continued

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Part I. Birds

Species (Synonym)	Age wk	Weight, kg		Reference	Species (Synonym)	Age wk	Weight, kg		Reference
		♂	♀				♂	♀	
	8	2.060	1.630			14	4.994	4.086	
New Hampshire	Hatched	0.041	0.036	7	130	15	5.675	4.540	
	1	0.086	0.082		131	16	6.356	4.994	
	2	0.154	0.154		132	17	7.037	5.448	
	3	0.272	0.250		133	18	7.673	5.902	
	4	0.404	0.363		134	19	8.308	6.311	
	5	0.563	0.504		135	20	8.944	6.719	
	6	0.735	0.640		136	21	9.579	7.128	
	7	0.934	0.807		137	22	10.170	7.400	
	8	1.152	0.948		138	23	10.805	7.627	
	9	1.325	1.107		139	24	11.441	7.854	
	10	1.628	1.284		140	25	12.076	
	12	1.849	1.551		141	26	12.712	
	14	2.554	1.828		142	27	13.302	
	16	2.994	2.019		143	28	13.892	
18	3.293	2.254	144						
20	3.375	2.309	145						
White Leghorn ^{2/}	Hatched	0.036	0.036	7,14	146	1	0.114	0.104	13
	1	0.059	0.070		147	2	0.227	0.204	
	2	0.123	0.125		148	3	0.454	0.363	
	3	0.191	0.190		149	4	0.681	0.590	
	4	0.268	0.265		150	5	0.953	0.817	
	5	0.354	0.350		151	6	1.317	1.044	
	6	0.449	0.450		152	7	1.680	1.313	
	7	0.603	0.550		153	8	2.088	1.634	
	8	0.689	0.640		154	9	2.589	1.998	
	9	0.875	0.730		155	10	3.133	2.406	
	10	0.944	0.820		156	11	3.677	2.860	
	11	.....	0.895		157	12	4.268	3.223
	12	1.243	0.960		158	13	4.812	3.541	
	13	.....	1.025		159	14	5.357	3.859
14	.....	1.090	160	15	5.902	4.177		
15	.....	1.155	161	16	6.447	4.449		
16	.....	1.220	162	17	6.946	4.722		
17	.....	1.270	163	18	7.446	4.949		
18	.....	1.320	164	19	7.945	5.176		
19	.....	1.365	165	20	8.399	5.357		
20	.....	1.410	166					
21	.....	1.455	167					
22	.....	1.500	168					
<i>Meleagris gallopavo</i> Broad-Breasted Bronze & Broad-Breasted White	1	0.123	0.123	13	169	Hatched	0.04	0.04	10
	2	0.250	0.241		170	2	0.08	0.08	
	3	0.431	0.363		171	4	0.28	0.25	
	4	0.636	0.545		172	6	0.56	0.48	
	5	0.863	0.726		173	8	0.85	0.69	
	6	1.135	0.908		174	10	1.22	0.96	
	7	1.407	1.226		175	12	1.64	1.24	
	8	1.816	1.589		176	14	2.10	1.58	
	9	2.225	1.952		177	16	2.60	1.98	
	10	2.679	2.361		178	18	3.32	2.52	
	11	3.178	2.769		179	20	4.05	3.00	
	12	3.723	3.178		180	22	4.62	3.32	
	13	4.313	3.632		181	24	5.10	3.48	
				26	5.50	3.62			
				28	5.78	3.71			
				30	5.95	3.77			
				36	6.26	3.91			
				40	6.35	3.96			

^{1/} Data for males are from reference 7; data for females are from reference 13, and are estimates of average weights of

commercial egg-production strains. ^{3/} Broiler-fryer-roaster type.

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Part I. Birds

	Species (Synonym)	Age wk	Weight, kg		Reference
			♂	♀	
182	<i>Phasianus colchicus</i> , Chinese strain	0	0.020	0.020	11
183		1	0.042	0.042	
184		2	0.086	0.086	
185		3	0.177	0.150	
186		4	0.263	0.218	
187		5	0.363	0.300	
188		6	0.436	0.372	
189		7	0.545	0.454	
190		8	0.658	0.522	
191		9	0.772	0.590	

	Species (Synonym)	Age wk	Weight, kg		Reference
			♂	♀	
192		10	0.890	0.663	
193		11	0.999	0.726	
194		12	1.090	0.781	
195		13	1.180	0.835	
196		14	1.248	0.885	
197		15	1.317	0.926	
198		16	1.362	0.953	
199		17	1.389	0.976	
200		18	1.416	0.999	

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References

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Part II. Reptiles and Amphibians

Data are for snout-to-vent length, unless otherwise indicated. For information on additional species of reptiles and amphibians, consult reference 2. Subjects: GS = grow-

ing season. Data in brackets refer to the column heading in brackets. Values in parentheses are ranges, estimate "c" (see Introduction).

	Species [Location]	Subjects	Length, mm	Reference
	Reptilia			
1	<i>Agkistrodon</i>	Newborn	220(200-299)	10
2	<i>con-</i>	♂, 1 yr	354(300-409)	
3	<i>tortrix</i>	♂, 2 yr	480(410-530)	
4	<i>mokeson</i>	♂, 3 yr	560(531-589)	
5	(<i>Ancistro-</i>	♂, 4 yr	620(590-650)	
6	<i>don con-</i>	♂, 5 yr	668(651-684)	
7	<i>tortrix</i>	♂, 6 yr	710(685-734)	
8	<i>mokeson</i>)	♂, 7 yr	760(735-785)	
9	[Kansas]	♂, 8+ yr	>786	
10		♀, 1 yr	345(300-390)	
11		♀, 2 yr	450(391-510)	

	Species [Location]	Subjects	Length, mm	Reference
12		♀, 3 yr	538(511-565)	
13		♀, 4 yr	578(566-589)	
14		♀, 5 yr	598(590-615)	
15		♀, 6 yr	626(616-635)	
16		♀, 7 yr	643(636-650)	
17		♀, 8+ yr	>651	
18	<i>Anolis caro-</i>	Hatchlings	(22-25)	13
19	<i>linensis</i>	8 mo	40	
20	[Louisiana]	12 mo	(35-45)	
21		21 mo	(50-52)	
22		♂, 24 mo	60	
23		♀, 18 mo	(45-48)	

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Part II. Reptiles and Amphibians

Species [Location]	Subjects	Length, mm	Reference	Species [Location]	Subjects	Length, mm	Reference
24 <i>Crotalus vir-</i>	20♂, 1 yr	457.2(365-498)	30	69	2♂, 11 mo	58.7(52.5-65.0)	
25 <i>idis luto-</i>	4♂, 2 yr	556.8(492-627)		70	1♂, 12 mo	61	
26 <i>sus</i> [Utah]	6♂, 3 yr	655.3(609-711)		71	2♂, 13 mo	60(56-64)	
27	2♂, 4 yr	701.0(678-724)		72	1♂, 14 mo	66	
28	2♂, 5 yr	703.6(645-762)		73	1♂, 21 mo	72.5	
29	2♂, 6 yr	769.6(724-815)		74	4♂, 22 mo	69(67-73)	
30	1♂, 8 yr	909.3		75	2♂, 24 mo	71(70-72)	
31	1♂, 9 yr	833.1		76	2♂, 33 mo	76.5(73-80)	
32	14♀, 1 yr	449.5(419-503)		77	1♂, 34 mo	78	
33	2♀, 2 yr	553.7(530-574)		78	2♂, 45 mo	78(74-82)	
34	1♀, 3 yr	685.8		79	1♂, 57 mo	82	
35	2♀, 4 yr	662.9(642-681)		80	1♂, >9 yr	82	9
36	1♀, 6 yr	665.5		81	3♀, 9 mo	49(46.0-50.5)	8
37	2♀, 8 yr	713.7(711-716)		82	1♀, 10 mo	48	
38 <i>Elaphe ob-</i>	31 hatchlings	(290-368)	11	83	2♀, 11 mo	52.7(51.0-54.5)	
39 <i>soleta ob-</i>	1♂, 1.5 mo	372		84	1♀, 12 mo	59	
40 <i>soleta</i>	1♂, 23 mo	733		85	1♀, 13 mo	64	
41 [Kansas]	3♂, 33-37 mo	859(822-922)		86	3♀, 22 mo	74	
42	3♂, 56-57 mo	1083(1075-1098)		87	2♀, 26 mo	71.5(69-74)	
43	1♂, 105 mo	1208		88	2♀, 33 mo	78	
44	1♂, 132 mo	1300		89	2♀, 34 mo	77(76-78)	
45	1♀, 1 mo	364		90	1♀, 35 mo	73	
46	1♀, 14 mo	625		91	1♀, 37 mo	79.5	
47	1♀, 26 mo	757		92	2♀, 45 mo	80	
48	2♀, 31-37 mo	899(846-952)			<i>Gopherus agassizii</i> ^{2/}		
49	3♀, 45-49 mo	1029(960-1100)			[California]		
50	2♀, 56-58 mo	1024(1020-1028)		93	Captive	37 subjects, 1-5 da	45.1(36.0-53.0) 12,14, 21,22, 27
51	1♀, 71 mo	1127		94		5 subjects, 1 wk	46.1(42.7-51.2) 14
52	1♀, 85 mo	1144		95		10 subjects, 2 wk	47.5(45.5-48.5)
53	1♀, 128 mo	1228		96		11 subjects, 4-5 wk	48.3(45.5-49.8)
54	♂♀, 1 yr	(500-650)		97		10 subjects, 6 wk	49.0(46.0-50.4)
55 <i>E. obsoleta</i>	15 hatchlings	306.6(267-331)	19	98		3 subjects, 10-11 wk	47.6(46.3-48.3)
56 <i>obsoleta</i> ^{1/}	15 subjects, ca. 46 da	330		99		10 subjects, 12 wk	50.5(47.3-51.8)
57 [Maryland]	15 subjects, ca. 77 da	356		100		6 subjects, 4 mo	51.0(49.2-52.5)
58	15 subjects, ca. 108 da	403(343-545)		101		23 subjects, 7.5-8.5 mo	49.7(44.5-66.8) 12,14
59	1 subject, 4 mo	545		102		30 subjects, 10.5-12 mo	58.2(42.0-79.6) 12,14, 21,22, 27
60	♂, adult	(1095-1835)	31	103		13 subjects, 15.5-16 mo	60.3(50.0-72.2) 14
61	♀, adult	(715-1800)		104		8 subjects, 18.5 mo	72.0(63.5-80.8)
62 <i>Eumeces fasciatus</i>	Hatchlings	(23-27)	8	105		10 subjects, 22.5-25.5 mo	77.8(51.8-98.7) 14,22
63 [Kansas]	1 subject, <2 wk	27					
64	1 subject, 1 mo	36					
65	1♂, 3 wk	34					
66	1♂, 8.5 mo	43					
67	1♂, 9 mo	46.5					
68	1♂, 10 mo	48					

^{1/} Data are for total length. ^{2/} Data are for carapace length.

continued

32. GROWTH: VERTEBRATES OTHER THAN MAMMALS

Part II. Reptiles and Amphibians

Species [Location]	Subjects	Length, mm	Refer- ence	Species [Location]	Subjects	Length, mm	Refer- ence	
106	14 subjects, 28 mo	78.1(59.0-98.7)	14	148	<i>Natrix septemvittata</i> ^{1/}	12 newborn	183(166-225)	28
107	11 subjects, 34-38 mo	86.5(69.6-100.0)	14,22, 27	149		12 subjects, 3 mo	230.5(196-255)	
108	4 subjects, 4 yr 4.5 mo	101.0(91.4-111.8)	14	150	[Ohio]	17 subjects, 1 yr	325.2(256-375)	
109	3 subjects, 4 yr 11 mo-5 yr	84.4(83.4-86.5)	14,22	151		68♂, >2 yr	529(375-692)	
110	8 subjects, 6 yr-6 yr 3 mo	96.6(86.8-117.7)		152		58♀, >2 yr	584(375-787)	
111	2 subjects, 6 yr 11 mo	111.8(103.8-119.9)	14	153	<i>Sceloporus occidentalis</i> [North- ern Cali- fornia & Oregon]	4♂, <1 yr	32.5(28.0-37.0)	6
112	1♂, 8 yr	115	14,22	154		3♂, 1 yr	66.8(65.0-68.5)	
113	1♂, 10 yr	123		155		4♂, 2 yr	70.7(70.0-72.0)	
114	1♂, 11 yr	138		156		4♂, 3 yr	72.3(71.5-73.0)	
115	1♂, 12 yr	150		157		1♂, 4 yr	72.0	
116	1♂, 13 yr	164		158		1♂, 5 yr	74.0	
117	1♂, 14 yr	174		159		6♀, <1 yr	32.5(27.0-40.0)	
118	1♂, 15 yr	187		160		5♀, 1 yr	60.0(54.0-63.0)	
119	1♂, 18 yr	205		161		6♀, 2 yr	67.1(65.0-70.0)	
120	1♂, 20 yr	232		162		6♀, 3 yr	68.5(66.0-72.0)	
121	1♂, adult	302	14	163		1♀, 4 yr	74.0	
122	6 yr 4 mo later	308			<i>Sternotherus odoratus</i> ^{2/}			
123	1♀, adult	280		164	[Indiana]	2 hatches	(18.3-22.0)	1
124	5 yr later	287		165		3 da	(18.6-22.2)	
125	8♂, adult	327(290-387)	14,26	166		5 da	(19.3-22.5)	
126	2♀, adult	327.5(286-369)		167		7 da	(19.5-22.7)	
127	Noncap- tive	337	12	168		9 da	(19.6-23.2)	
128	1♂	283		169		11 da	(19.7-23.4)	
129	30♂, adult	286		170		14 da	(19.7-23.4)	
130	1♀	286		171		30 da	(19.9-23.7)	
	30♀, adult	242.7		172	[Iowa]	4 hatchlings	22.8(22-24)	7
	[Utah]			173		3♀, adult	97(80-108)	
131	Noncap- tive	260	14	174	[Michi- gan]	200 hatchlings	23(19-25)	23
132	26 yr 8 mo later	263		175		9 subjects, 6 mo	32.5(26-37)	
133	1♂	257		176		4 subjects, 1.5 yr	42.5(39-45)	
134	24 yr 10 mo later	267		177		9 subjects, 2.5 yr	52(48-55)	
135	1♀	217		178		10 subjects, 3.5 yr	61.5(56.5-64.0)	
136	25 yr 10 mo later	218		179		11 subjects, 4.5 yr	67(64-70)	
137	65♂, adult	271.2(223-316)	29	180		15 subjects, 5.5 yr	72(69-75)	
138	50♀, adult	236.9(170-293)		181		12 subjects, 6.5 yr	74.5(72-78)	
139	<i>Malaclemys terrapin pileata</i> ^{3/}	(18.0-35.7)	4	182		5 subjects, 7.5 yr	78(74.5-80.0)	
140	End 1st GS	(30.3-61.1)		183		8+ yr	>80	
141	End 2nd GS	(54.4-86.7)		184	<i>Terrapene ornata</i> ^{3/}	46♂, 1 yr	45(27-64)	18
142	End 3rd GS	(65.4-107.3)		185	[Kansas]	47♂, 2 yr	57(35-72)	
143	10; end 4th GS	(91.1-115.5)		186		48♂, 3 yr	66(37-86)	
144	6; end 5th GS	(102.5-117.5)		187		48♂, 4 yr	75(53-96)	
145	2; end 6th GS	(109.9-115.0)		188		46♂, 5 yr	84(64-114)	
146	57♂, adult	(98.7-123.0)		189		38♂, 6 yr	92(66-108)	
147	2♀, adult	176.5(176-177)		190		32♂, 7 yr	97(70-114)	
				191		30♂, 8 yr	102(82-118)	

^{1/} Data are for total length. ^{2/} Data are for carapace length. ^{3/} Data are for plastron length.

continued

32. GROWTH: VERTEBRATES OTHER THAN MAMMALS

Part II. Reptiles and Amphibians

Species [Location]	Subjects	Length, mm	Refer- ence	Species [Location]	Subjects	Length, mm	Refer- ence		
192	22♂, 9 yr	106(83-119)		238	<i>Hyla regilla</i> [Oregon]	1156 subjects, just metamorphosed	13.8(12.1-15.3)	17	
193	19♂, 10 yr	109(92-119)		239		5 subjects, 2 wk	19.8(18-21)		
194	15♂, 11 yr	112(97-121)		240		4 subjects, 3 wk	22(19-25)		
195	9♂, 12 yr	115(99-121)		241		6 subjects, 4 wk	20.3(17-23)		
196	65♀, 1 yr	43(26-62)		242		6 subjects, 5 wk	21.9(20-24)		
197	67♀, 2 yr	55(34-74)		243		7 subjects, 6 wk	21.9(20-24)		
198	66♀, 3 yr	65(42-80)		244		1 subject, 7 wk	23		
199	67♀, 4 yr	72(56-94)		245		1 subject, 8 wk	21		
200	67♀, 5 yr	80(61-102)		246		38 subjects, >2 yr	38.6(37-40)		
201	63♀, 6 yr	87(67-115)		247		2♂, 9 mo	31(29.4-32.6)		
202	59♀, 7 yr	94(76-117)		248	<i>Plethodon</i>	10 hatchlings	13.7(12-15)	15	
203	47♀, 8 yr	102(81-125)		249	<i>glutinosus</i>	14 subjects, 2 mo	17.2(15-19)	15,16	
204	35♀, 9 yr	107(89-129)		250	[Florida]	36 subjects, 3 mo	20(15-23)	16	
205	29♀, 10 yr	111(94-135)		251		16 subjects, 5 mo	22.3(20-25)		
206	17♀, 11 yr	114(95-129)		252		15 subjects, 8 mo	31.9(27-36)	15	
207	12♀, 12 yr	118(111-131)		253		23 subjects, 12 mo	39.9(32-46)		
208	7♀, 13 yr	120(114-129)		254		12 subjects, 14 mo	41.5(34-46)		
209	<i>Thamnophis sirtalis</i> [Michigan]	40♂, newborn	141.2(118-151)	20		1♂, 22 mo	50		
210		♂, 1 yr	350	5		112♂, adult; 2+ yr	58.2(55-65)		
211		♂, 2 yr	430			1♀, 17 mo	43		
212		♂, 3 yr	480			138♀, adult; 2+ yr	59.4(55-69)		
213		♂, 4 yr	520		255	<i>Rana catesbeiana</i> ^{1/}	At metamorphosis	52(36-60)	24
214		♂, 5 yr	550		260	[New York]	8 mo	55(39-64)	
215		♂, 6 yr	580		261		9 mo	62(45-70)	
216		♂, 7 yr	590		262		10 mo	73(46-82)	
217		♂, 8 yr	600		263		11 mo	74(47-94)	
218		38♀, newborn	139.5(117-151)	20	264		12 mo	86(59-106)	
219		♀, 1 yr	370	5	265		13 mo	92(65-112)	
220		♀, 2 yr	480		266		15 mo	94(68-114)	
221		♀, 3 yr	550		267		♂, adult	>85	
222		♀, 4 yr	590		268		♀, adult	>90	
223		♀, 5 yr	640		269	<i>R. catesbeiana</i> ^{4/}	1 yr	103	25
224		♀, 6 yr	670		270		2 yr	124	
225		♀, 7 yr	690		271	[Missouri]	3 yr	133	
226		♀, 8 yr	700		272		4 yr	145	
Amphibia					273		5 yr	152	
227	<i>Bufo valli-</i> <i>ceps</i> [Texas]	16♂, "August juvenile"	20.8(13-34)	3	274		6 yr	162	
228		1♂, 2 mo later	55		275	<i>R. pipiens</i>	At metamorphosis	25(20.0-30.5)	24
229		8♂, 8 mo later	68.2(61-78)		276	[New York]	1 mo	33(28-39)	
230		5♂, 9 mo later	72.6(64-77)		277		2 mo	41(36-48)	
231		5♂, 11 mo later	78.2(71-86)		278		3 mo	46(40-53)	
232		6♂, 12 mo later	79.8(75-88)		279		♂, 15 mo	(52-82)	
233		5♀, "August juvenile"	26(15-38)		280		♀, 15 mo	(54.0-92.5)	
234		1♀, 1 mo later	53						
235		2♀, 10 mo later	94(93-95)						
236		2♀, 11 mo later	99.5(97-102)						
237		3♀, 13 mo later	82.5(70-104)						

1/ Data are for total length. 4/ After metamorphosis.

continued

32. GROWTH: VERTEBRATES OTHER THAN MAMMALS

Part II. Reptiles and Amphibians

Contributor: Hardy, Ross

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Part III. Fishes

For information on additional species of fishes, consult reference 3. Age was recorded as the number of completed years; "Max" refers to maximum length and/or weight.

Length: Measurements are total length from tip of head (jaws closed) to tip of tail, unless otherwise indicated.

	Species	Age yr	Length cm	Weight kg	Reference
	Osteichthyes				
1	<i>Acipenser fulvescens</i> ^{1/}	1	24	0.068	7,8,19,36
2		2	30	0.136	
3		4	45	0.39	
4		6	54	0.72	
5		8	60	1	
6		10	73	2.7	
7		20	98	8.8	
8		40	130	19.0	
9		60	146	22.3	
10	152	206	97.5		
11	<i>Carassius auratus</i>	1	9	11
12		2	14	.....
13	<i>Clupea harengus pallasi</i> ^{1,2/}	1	6	28
14		2	14	.....
15		4	21	.....
16		6	24	.....
17		8	26	.....

	Species	Age yr	Length cm	Weight kg	Reference
18	<i>Coregonus clupeaformis</i>	10	28	7,22,37
19		Max	40	0.31	
20		1	13	0.03	
21		2	22	0.08	
22		4	35	0.40	
23		6	42	0.70	
24		8	47	1.00	
25		10	52	1.38	
26		15	63	2.6	
27		20	75	4.0	
28	Max	80	4.88		
29	<i>Cyprinus carpio</i>	1	16	0.08	7,13,16
30		2	29	0.40	
31		4	44	1.2	
32		6	55	2.4	
33		8	61	3.2	
34		10	63	4.2	
35		Max	127	37.88	

^{1/} Length was measured from tip of snout to end of rays in center of caudal fin (fork length). ^{2/} Synonym: *C. pallasi*.

continued

32. GROWTH: VERTEBRATES OTHER THAN MAMMALS

Part III. Fishes

	Species	Age yr	Length cm	Weight kg	Reference
36	<i>Esox lucius</i>	1	22	0.10	7,13
37		2	36	0.46	
38		4	53	1.13	
39		6	68	2.25	
40		8	75	3.1	
41		10	83	4.3	
42		20	95	6.5	
43		Max	130	28.0	
44	<i>Gadus morhua</i>	1	16	16,32
45		2	41	.....
46		4	64	.....
47		6	81	.....
48	Max	142	25		
49	<i>Ictalurus punctatus</i>	1	9	0.01	7,16,21, 23,26
50		2	18	0.05	
51		4	32	0.25	
52		6	43	0.75	
53		8	51	1.40	
54		10	62	2.6	
55	40	81	8.5		
56	Max	127	24.05		
57	<i>Lepisosteus osseus</i>	1	50	0.28	2,7,25-27
58		2	63	0.60	
59		4	74	1.0	
60		6	80	1.25	
61		10	90	1.9	
62		20	122	6.0	
63	Max	160	18		
64	<i>Lepomis macrochirus</i>	1	5	0.005	6,15
65		2	9	0.026	
66		4	16	0.07	
67		6	20	0.17	
68		8	23	0.34	
69		10	23	0.34	
70	Max	39	1.955		
71	<i>Melanogrammus aeglefinus</i> ^{1/}	1	20	33,34
72		2	30	0.29	
73		4	45	0.9	
74		6	55	1.53	
75		8	61	.....
76	Max	90	.....	
77	<i>Micropterus salmoides</i>	1	11	0.023	6,20
78		2	20	0.12	
79		4	34	0.57	
80		6	41	1.02	
81		8	46	1.36	
82		10	51	1.81	
83	Max	95	10.48		
84	<i>Osmerus mordax</i>	1	10	0.01	5,7,30
85		2	16	0.03	

	Species	Age yr	Length cm	Weight kg	Reference
86		4	21	0.08	
87		Max	36	0.141	
88	<i>Perca flavescens</i>	1	7	0.003	6,16,35
89		2	12	0.03	
90		4	20	0.11	
91		6	25	0.23	
92		8	27	0.285	
93		10	30	0.37	
94		Max	41.9	1.913	
95	<i>Polyodon spathula</i>	1	30	0.08	1,7,12,14
96		2	44	0.25	
97		4	80	1.4	
98		6	100	3.2	
99		10	108	4.5	
100		30	130	13	
101	Max	188	74		
102	<i>Pomoxis annularis</i>	1	7	0.006	6,18,31
103		2	15	0.03	
104		4	25	0.21	
105		6	32	0.45	
106		8	38	0.71	
107		Max	40	0.865	
108	<i>Salmo salar</i> ^{1/}	1	5	0.015	7,9,16
109		2	10	0.033	
110		4	76	4.54	
111		6	107	16	
112		13	134	.....
113		Max	120	47	
114	<i>S. trutta</i>	1	9	0.02	7,16,17
115		2	18	0.10	
116		4	36	0.80	
117		6	56	1.8	
118		8	64	4.26	
119		Max	120	18.5	
120	<i>Salvelinus fontinalis</i>	1	10	7,10
121		2	10	.....
122		4	28	.....
123		6	42	.....
124	Max	80	6.58		
125	<i>Thunnus thynnus</i> ^{1/}	1	64	24,29,39
126		2	82	.....
127		4	118	.....
128		6	153	.....
129	Max	311	726		
Agnatha					
130	<i>Petromyzon marinus</i>	1	3.8	4,38
131		2	7.9	.....
132		4	43	.....
133		Max	84	1.14	

^{1/} Length was measured from tip of snout to end of rays in center of caudal fin (fork length).

continued

32. GROWTH: VERTEBRATES OTHER THAN MAMMALS

Part III. Fishes

Contributor: Carlander, Kenneth D.

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33. LIFE EXPECTANCY AT BIRTH: MAN, VARIOUS NATIONS AND REGIONS

	Locality [Population]	Time Period	Life Ex- pectancy yr		Locality [Population]	Time Period	Life Ex- pectancy yr		
			♂	♀			♂	♀	
			North America						
1	United States [Total]	1968	66.6	74.0	8	Canada	1965-67	68.8	75.2
2	[White]	1968	67.5	74.9	9	Costa Rica	1962-64	61.9	64.8
3	[Nonwhite]	1968	60.1	67.5	10	Dominica	1958-62	57.0	59.2
4	Antigua	1959-61	60.5	64.3	11	Dominican Republic	1959-61	57.2	58.6
5	Barbados	1959-61	62.7	67.4	12	El Salvador	1960-61	56.6	60.4
6	Bermuda	1965-66	65.6	72.4	13	Granada	1959-61	60.1	65.6
7	British Honduras	1944-48	45.0	49.0	14	Greenland	1952-59 ^{1/}	51.4	53.6
					15	Guadeloupe & Martinique ^{2/}	1959-63	62.5	66.5
					16	Guatemala	1963-65	48.3	49.7

^{1/} Provisional. ^{2/} Data for these islands were combined because of similarity in mortality and the greater stability of larger numbers.

continued



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Federation of American Societies for Experimental Biology

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