

Ecography

ECOG-04644

Pincheira-Donoso, D., Meiri, S., Jara, M., Olalla-Tárraga, M. Á. and Hodgson, D. J. 2019. Global patterns of body size evolution are driven by precipitation in legless amphibians. – *Ecography* doi: 10.1111/ecog.04644

Supplementary material

Appendix 1. Table A1. Data used in our study. Body size expressed in millimetres (mm) of total length. Environmental predictors are elevations (in metres above sea level), latitude (minutes scaled to 100 units, and sign indicated Northern [positive] and Southern [-] hemisphere), mean annual temperature (AnnTemp, in °C), seasonality in temperature (TempSeason, in °C between the warmest and the coldest temperature recorded during the year), mean annual precipitation (MeanPrecip, in mm of rainfall), seasonality in precipitation (PrecipSeason, in mm of rainfall between the driest and wettest record of the year), and net primary productivity (NPP). See Methods section in the main body of the paper for details. Species in bold indicate taxa for which phylogenetic data are available.

Family	Species	Body Size	Latitude	AnnTemp	TempSeason	MeanPrecip	PrecipSeason	NPP
Caeciliidae	<i>Caecilia abitaguae</i>	1303	2.2579	20.4	12.20	2724	20	875
Caeciliidae	<i>Caecilia albiventris</i>	600	2.15	20.33	12.30	2072.33	37.67	968.91
Caeciliidae	<i>Caecilia antioquiaensis</i>	1200	7.7095	27.9	11.70	3014	52	1028
Caeciliidae	<i>Caecilia attenuata</i>	910	0.2017	18.3	13.00	2689	22	811
Caeciliidae	<i>Caecilia bokermanni</i>	527	3.0250	26.4	11.20	2946	14	1003
Caeciliidae	<i>Caecilia caribea</i>	614	5.6030	26.2	11.40	2476	44	994
Caeciliidae	<i>Caecilia corpulenta</i>	523	4.6772	11.9	12.20	1976	43	900
Caeciliidae	<i>Caecilia crassisquama</i>	728	2.1779	15.7	13.50	2130	32	839
Caeciliidae	<i>Caecilia degenerata</i>	555	5.4615	13.9	12.60	940	40	833
Caeciliidae	<i>Caecilia disossea</i>	1170	3.1159	25.9	11.40	2443	13	1096
Caeciliidae	<i>Caecilia dunni</i>	464	1.1364	22.0	11.10	4212	20	933
Caeciliidae	<i>Caecilia flavopunctata</i>	590	10.3991	26.7	12.30	1368	46	816
Caeciliidae	<i>Caecilia gracilis</i>	790	1.5087	26.7	10.60	2515	36	925
Caeciliidae	<i>Caecilia guntheri</i>	1602	3.3112	17.2	11.90	2517	35	1240
Caeciliidae	<i>Caecilia inca</i>	1069	3.6251	26.1	11.20	2849	21	1009
Caeciliidae	<i>Caecilia isthmica</i>	660	6.0502	26.1	10.60	7205	17	909
Caeciliidae	<i>Caecilia leucocephala</i>	455	4.3772	25.7	7.80	7048	26	902
Caeciliidae	<i>Caecilia marcusii</i>	510	16.0739	25.4	17.70	3156	52	950
Caeciliidae	<i>Caecilia nigricans</i>	1030	4.6800	25.9	7.80	6796	23	840
Caeciliidae	<i>Caecilia occidentalis</i>	1035	2.7566	16.6	13.50	2029	41	901
Caeciliidae	<i>Caecilia orientalis</i>	625	1.4194	18.0	11.50	1436	48	722
Caeciliidae	<i>Caecilia pachynema</i>	900	4.7292	20.1	11.40	1692	31	1008
Caeciliidae	<i>Caecilia perdita</i>	505	5.3042	26.2	9.20	7404	19	838
Caeciliidae	<i>Caecilia pressula</i>	437	2.3314	26.9	11.30	1633	78	1054
Caeciliidae	<i>Caecilia subdermalis</i>	790	3.6613	24.0	12.40	1266	41	956
Caeciliidae	<i>Caecilia subnigricans</i>	375	7.8749	25.9	11.60	3755	44	1044
Caeciliidae	<i>Caecilia tentaculata</i>	1075	3.1570	26.6	10.30	2628	33	885
Caeciliidae	<i>Caecilia tenuissima</i>	390	0.2710	23.6	11.50	2799	80	931
Caeciliidae	<i>Caecilia thompsoni</i>	1520	4.7360	25.4	12.20	1372	44	883

Caeciliidae	<i>Caecilia volceni</i>	357	8.6482	25.3	12.00	2841	60	985
Caeciliidae	<i>Oscacilia bassleri</i>	975	4.9215	26.6	11.40	1989	21	914
Caeciliidae	<i>Oscacilia elongata</i>	620	8.1477	26.7	9.80	2004	55	996
Caeciliidae	<i>Oscacilia equatorialis</i>	432	0.26	22.30	10.40	2732	75	947.25
Caeciliidae	<i>Oscacilia hypereumeces</i>	640	26.2502	21.1	16.30	1735	36	734
Caeciliidae	<i>Oscacilia koepckeorum</i>	495	3.87	26.4	11.20	2813	17	980
Caeciliidae	<i>Oscacilia ochrocephala</i>	620	8.6366	25.0	9.40	2069	70	872
Caeciliidae	<i>Oscacilia osae</i>	382	8.5634	26.0	14.30	4390	59	1194
Caeciliidae	<i>Oscacilia polyzona</i>	712	7.3564	27.1	10.80	3436	46	1009
Chikilidae	<i>Chikila alcocki</i>	271	26.48	20.40	21.89	2241.40	85.00	689.64
Chikilidae	<i>Chikila darlong</i>	198	26.95	23.70	21.84	2383.00	85.00	778.90
Chikilidae	<i>Chikila fulleri</i>	230	24.8104	24.9	20.50	3136	78	622
Chikilidae	<i>Chikila gaiduwani</i>	251	25.73	22.92	19.70	3292.42	97.58	812.58
Dermophiidae	<i>Dermophis costaricense</i>	387	10.0837	17.2	11.10	2861	40	667
Dermophiidae	<i>Dermophis glandulosus</i>	405	8.6595	23.1	11.60	2659	60	895
Dermophiidae	<i>Dermophis gracilior</i>	387	8.9964	24.8	13.90	2642	61	1191
Dermophiidae	<i>Dermophis mexicanus</i>	600	15.1819	16.7	12.10	1813	57	1102
Dermophiidae	<i>Dermophis oaxacae</i>	454	17.2796	17.4	20.30	1580	104	663
Dermophiidae	<i>Dermophis occidentalis</i>	235	9.2955	26.0	14.10	3551	63	917
Dermophiidae	<i>Dermophis parviceps</i>	217	9.1666	25.4	10.60	3713	27	1246
Dermophiidae	<i>Geotrypetes angeli</i>	236	9.4595	25.1	27.50	1929	76	838
Dermophiidae	<i>Geotrypetes pseudoangeli</i>	234	8.0325	24.2	20.00	1880	64	913
Dermophiidae	<i>Geotrypetes seraphini</i>	400	0.8833	26.7	10.10	3334	60	799
Dermophiidae	<i>Gymnopsis multiplicata</i>	480	13.1085	25.1	12.90	2865	60	692
Dermophiidae	<i>Gymnopsis syntrema</i>	307	15.9091	25.6	11.60	3695	69	1095
Dermophiidae	<i>Schistometopum gregorii</i>	363	4.3833	25.5	13.70	971	59	472
Dermophiidae	<i>Schistometopum thomense</i>	366	0.2334	22.0	9.70	2488	59	883
Herpeliidae	<i>Boulengerula boulengeri</i>	308	4.8320	18.7	15.10	1337	61	794
Herpeliidae	<i>Boulengerula changamwensis</i>	235	13.0215	23.9	17.80	1224	111	685
Herpeliidae	<i>Boulengerula denhardti</i>	213	0.3526	21.6	18.90	1197	105	681
Herpeliidae	<i>Boulengerula fischeri</i>	397	2.5142	19.9	13.80	1325	47	548
Herpeliidae	<i>Boulengerula niedeni</i>	290	3.5001	22.7	15.10	814	71	485
Herpeliidae	<i>Boulengerula taitana</i>	420	3.4274	23.7	15.60	729	75	503
Herpeliidae	<i>Boulengerula uluguruensis</i>	330	6.4707	24.6	16.60	836	67	733
Herpeliidae	<i>Herpele multiplicata</i>	239	4.5551	26.2	10.40	2955	60	737
Herpeliidae	<i>Herpele squalostoma</i>	565	1.3175	23.8	12.40	1625	59	872

Ichthyophiidae	<i>Ichthyophis acuminatus</i>	295	18.6226	24.7	23.60	1001	78	705
Ichthyophiidae	<i>Ichthyophis alfredi</i>	330	25.54	20.35	18.85	4167.00	102.00	879.32
Ichthyophiidae	<i>Ichthyophis asplenius</i>	236	1.6011	26.0	9.60	4142	48	928
Ichthyophiidae	<i>Ichthyophis atricollaris</i>	285	0.15	26.95	8.70	3302.50	27.50	921.63
Ichthyophiidae	<i>Ichthyophis bannanicus</i>	378.5	22.5757	21.5	22.60	1511	68	562
Ichthyophiidae	<i>Ichthyophis beddomei</i>	275	12.3506	22.3	14.70	1677	103	859
Ichthyophiidae	<i>Ichthyophis biangularis</i>	258	1.6011	26.0	9.60	4142	48	928
Ichthyophiidae	<i>Ichthyophis billitonensis</i>	135	2.8890	26.1	9.10	3001	31	736
Ichthyophiidae	<i>Ichthyophis bombayensis</i>	700	14.6993	24.4	17.60	2023	139	672
Ichthyophiidae	<i>Ichthyophis cardamomensis</i>	321.7	12.24	24.43	13.73	2252.67	70.33	882.33
Ichthyophiidae	<i>Ichthyophis catlocensis</i>	183.5	11.62	25.40	14.10	2286	74	837.31
Ichthyophiidae	<i>Ichthyophis chaloensis</i>	215.7	17.70	21.90	17.70	2321	81	1001.66
Ichthyophiidae	<i>Ichthyophis daribokensis</i>	315	25.55	20.83	18.93	4070.75	101.25	877.21
Ichthyophiidae	<i>Ichthyophis davidi</i>	370	15.65	26.00	16.60	2891	142	651.51
Ichthyophiidae	<i>Ichthyophis dulitensis</i>	235	3.2116	21.0	8.40	3474	12	1126
Ichthyophiidae	<i>Ichthyophis elongatus</i>	300	0.8333	26.3	9.90	2782	33	972
Ichthyophiidae	<i>Ichthyophis garoensis</i>	323	25.9547	24.3	20.10	2548	93	653
Ichthyophiidae	<i>Ichthyophis glandulosus</i>	250	6.5777	23.6	10.80	2270	38	700
Ichthyophiidae	<i>Ichthyophis glutinosus</i>	450	6.8087	18.2	13.50	2338	30	650
Ichthyophiidae	<i>Ichthyophis hypocyaneus</i>	260	6.6225	24.9	12.00	2706	33	680
Ichthyophiidae	<i>Ichthyophis khumhzi</i>	500	24	21.3	20.90	1982	83	767
Ichthyophiidae	<i>Ichthyophis kodaguensis</i>	274	12.23	22.2	14.10	2775	116	749
Ichthyophiidae	<i>Ichthyophis kohtaoensis</i>	471	15.3152	27.1	19.50	1208	86	381
Ichthyophiidae	<i>Ichthyophis lakimi</i>	292.5	6.05	16.30	8.90	2109.00	21.00	906.28
Ichthyophiidae	<i>Ichthyophis laosensis</i>	318	19.87	24.40	21.70	1405.00	85.00	837.12
Ichthyophiidae	<i>Ichthyophis larutensis</i>	301	4.9648	23.6	10.60	3440	29	902
Ichthyophiidae	<i>Ichthyophis longicephalus</i>	330	11.1318	20.9	14.00	2363	90	729
Ichthyophiidae	<i>Ichthyophis mindanaoensis</i>	327	7.4941	25.3	11.60	2356	37	732
Ichthyophiidae	<i>Ichthyophis monochrous</i>	350	3.2000	26.9	10.00	3184	34	1000
Ichthyophiidae	<i>Ichthyophis moustakius</i>	287	25	20.6	20.60	2617	83	829
Ichthyophiidae	<i>Ichthyophis multicolor</i>	402	16.45	26.80	15.30	2825.00	102.00	481.61
Ichthyophiidae	<i>Ichthyophis nguyenorum</i>	306.5	14.69	20.40	17.00	2203.00	76.00	1004.84
Ichthyophiidae	<i>Ichthyophis nokrekensis</i>	325	25.51	21.10	19.13	3971.00	100.67	882.35
Ichthyophiidae	<i>Ichthyophis orthoplicatus</i>	260	6.8552	20.5	12.10	1848	51	586
Ichthyophiidae	<i>Ichthyophis paucidentulus</i>	294	3.6300	23.4	10.80	2597	31	997
Ichthyophiidae	<i>Ichthyophis paucisulcus</i>	263	3.3408	24.4	11.10	3125	20	1122

Ichthyophiidae	<i>Ichthyophis pauli</i>	331.5	6.05	24.00	8.70	2357.00	18.00	914.23
Ichthyophiidae	<i>Ichthyophis pseudangularis</i>	225	6.7132	25.5	11.20	3744	33	712
Ichthyophiidae	<i>Ichthyophis sendenyu</i>	308	25.9	19.9	21.90	1813	83	714
Ichthyophiidae	<i>Ichthyophis sikkimensis</i>	320	27.0938	19.0	18.00	2748	113	661
Ichthyophiidae	<i>Ichthyophis singaporensis</i>	243	1.3640	26.8	9.30	2420	24	727
Ichthyophiidae	<i>Ichthyophis sumatranus</i>	285	1.1556	26.7	9.50	2441	29	543
Ichthyophiidae	<i>Ichthyophis supachaii</i>	330	7.9204	27.5	11.80	2027	81	585
Ichthyophiidae	<i>Ichthyophis tricolor</i>	330	9.4650	26.8	11.20	2532	67	836
Ichthyophiidae	<i>Ichthyophis weberi</i>	258	9.4728	25.1	10.50	1791	52	757
Ichthyophiidae	<i>Ichthyophis youngorum</i>	240	18.8583	22.3	23.40	1047	75	697
Ichthyophiidae	<i>Uraeotyphlus gansi</i>	283	8.5514	20.4	10.90	1700	51	593
Ichthyophiidae	<i>Uraeotyphlus interruptus</i>	185	9.3693	27.3	10.00	3038	77	678
Ichthyophiidae	<i>Uraeotyphlus malabaricus</i>	240	11.4036	14.6	16.20	1765	63	820
Ichthyophiidae	<i>Uraeotyphlus menoni</i>	248	10.7755	27.5	12.50	2770	99	751
Ichthyophiidae	<i>Uraeotyphlus narayani</i>	245	10.0880	26.8	12.50	3440	83	664
Ichthyophiidae	<i>Uraeotyphlus oommeni</i>	164	8.67	23.4	10.70	1645	53	539
Ichthyophiidae	<i>Uraeotyphlus oxyurus</i>	305	10.0036	27.5	11.60	3589	85	864
Indotyphlidae	<i>Gegeneophis carnosus</i>	280	12.4775	21.0	14.50	3045	122	806
Indotyphlidae	<i>Gegeneophis danieli</i>	193	15.95	27.4	14.60	2823	138	523
Indotyphlidae	<i>Gegeneophis goaensis</i>	220	15.6	26.6	15.70	2916	141	628
Indotyphlidae	<i>Gegeneophis krishni</i>	195	12.7167	27.1	10.90	3824	125	679
Indotyphlidae	<i>Gegeneophis madhavai</i>	256	13.62	26.4	13.40	4537	136	774
Indotyphlidae	<i>Gegeneophis mhadeiensis</i>	202	15.65	26.2	16.50	2865	142	650
Indotyphlidae	<i>Gegeneophis orientalis</i>	226	18.39	22.63	19.50	1301.33	87.67	459.10
Indotyphlidae	<i>Gegeneophis pareshi</i>	228	15.03	26.20	14.00	3238.00	139.33	693.41
Indotyphlidae	<i>Gegeneophis primus</i>	180	11.55	23.10	13.20	3916.00	122.00	657.93
Indotyphlidae	<i>Gegeneophis ramaswamii</i>	340	8.7786	26.5	10.30	1723	56	813
Indotyphlidae	<i>Gegeneophis tejaswini</i>	224	12.27	26.70	11.80	4169.00	123.00	797.85
Indotyphlidae	<i>Grandisonia alternans</i>	318	4.4666	25.2	6.20	2277	48	635
Indotyphlidae	<i>Grandisonia brevis</i>	112	4.6166	26.1	6.20	2255	48	635
Indotyphlidae	<i>Grandisonia larvata</i>	380	4.4666	25.2	6.30	2277	48	635
Indotyphlidae	<i>Grandisonia sechellensis</i>	190	4.4666	25.7	6.20	2275	49	635
Indotyphlidae	<i>Hypogeophis rostratus</i>	365	4.4666	25.1	6.20	2277	48	635
Indotyphlidae	<i>Idiocranium russeli</i>	114	5.2641	23.5	12.20	2506	72	771
Indotyphlidae	<i>Indotyphlus battersbyi</i>	240	18.5416	23.8	19.00	3415	158	516
Indotyphlidae	<i>Indotyphlus maharashtraensis</i>	205	17.3856	23.9	17.40	2463	151	532

Indotyphlidae	<i>Praslinia cooperi</i>	230	4.6166	24.5	6.40	2272	48	635
Indotyphlidae	<i>Sylvacaecilia grandisonae</i>	260	8.3868	20.7	19.60	1662	73	838
Rhinatreumatidae	<i>Epicrionops bicolor</i>	363	10.6513	25.9	14.40	1713	43	1080
Rhinatreumatidae	<i>Epicrionops columbianus</i>	161	3.0890	21.7	12.90	2678	34	927
Rhinatreumatidae	<i>Epicrionops marmoratus</i>	299	0.1443	21.8	10.40	2838	70	980
Rhinatreumatidae	<i>Epicrionops niger</i>	351	5.5042	19.6	12.10	1883	55	1177
Rhinatreumatidae	<i>Epicrionops parkeri</i>	208	6.7386	21.6	11.20	2990	44	1222
Rhinatreumatidae	<i>Epicrionops peruvianus</i>	286	13.4026	17.3	17.80	2353	52	872
Rhinatreumatidae	<i>Epicrionops petersi</i>	328	7.8287	25.7	14.10	2139	39	971
Rhinatreumatidae	<i>Rhinatrema bivittatum</i>	246	4.8522	26.5	11.00	2186	44	1097
Rhinatreumatidae	<i>Rhinatrema ron</i>	353	3.07	27.40	10.20	2154.00	46.00	707.05
Rhinatreumatidae	<i>Rhinatrema shiv</i>	184	5.65	24.95	10.10	2830.00	38.00	1119.12
Scolecophoridae	<i>Crotaphatrema bornmuelleri</i>	277	4.0292	24.6	9.90	3287	67	860
Scolecophoridae	<i>Crotaphatrema lamottei</i>	318	6.1948	15.8	14.00	1990	68	814
Scolecophoridae	<i>Crotaphatrema tchabalmbaboensis</i>	338	7.2826	19.2	17.80	1652	79	631
Scolecophoridae	<i>Scolecomorplus kirkii</i>	463	9.0413	18.0	16.20	1199	92	628
Scolecophoridae	<i>Scolecomorplus uluguruensis</i>	380	7.0527	20.3	15.60	1540	69	717
Scolecophoridae	<i>Scolecomorplus vittatus</i>	450	5.2700	22.4	16.80	891	59	812
Siphonopidae	<i>Brasilotyphlus braziliensis</i>	260	0.8009	26.0	11.00	2042	50	924
Siphonopidae	<i>Brasilotyphlus guarantanus</i>	305	7.87	24.45	17.25	2144.50	66.00	833.28
Siphonopidae	<i>Luetykenotyphlus brasiliensis</i>	502	25.4366	17.4	20.00	1746	20	639
Siphonopidae	<i>Microcaecilia albiceps</i>	240	1.3383	25.5	11.30	3518	30	904
Siphonopidae	<i>Microcaecilia butantan</i>	208	2.63	25.30	12.10	1969.00	64.00	877.72
Siphonopidae	<i>Microcaecilia dermatophaga</i>	183	5.45	26.30	10.55	2483.00	38.50	1127.29
Siphonopidae	<i>Microcaecilia grandis</i>	325	4.38	24.80	11.30	2611.00	43.00	1110.24
Siphonopidae	<i>Microcaecilia iwokramae</i>	112	4.3297	25.20	11.30	2207.00	57.00	1177.44
Siphonopidae	<i>Microcaecilia iyob</i>	190	6.72	26.20	9.20	2043.00	36.00	1079.06
Siphonopidae	<i>Microcaecilia marvaleewakeae</i>	247	2.05	27.18	10.66	2103.80	58.40	898.48
Siphonopidae	<i>Microcaecilia nicefori</i>	263	6.1897	27.7	11.10	2476	41	1071
Siphonopidae	<i>Microcaecilia pricei</i>	191	5.8056	24.0	11.00	3153	38	1136
Siphonopidae	<i>Microcaecilia rabei</i>	187	4.5843	26.8	11.00	2150	53	1188
Siphonopidae	<i>Microcaecilia rochai</i>	227	0.98	25.93	11.33	2309.67	53.00	990.13
Siphonopidae	<i>Microcaecilia savagei</i>	153	4.33	24.70	11.40	2255.00	57.00	1177.61
Siphonopidae	<i>Microcaecilia taylori</i>	225	3.2726	26.2	12.10	2078	60	1155
Siphonopidae	<i>Microcaecilia trombetas</i>	218	0.96	25.70	11.60	2188.00	48.00	937.57
Siphonopidae	<i>Microcaecilia unicolor</i>	240	4.6633	25.4	10.60	3204	46	1171

Siphonopidae	<i>Mimosiphonops vermiculatus</i>	290	22.2915	18.5	17.50	1628	66	840
Siphonopidae	<i>Siphonops annulatus</i>	454	8.5951	25.4	19.10	2390	68	902
Siphonopidae	<i>Siphonops hardyi</i>	178	22.1862	17.9	17.20	1558	67	845
Siphonopidae	<i>Siphonops insulanus</i>	200	22.85	18.80	16.20	1397.50	58.50	669.42
Siphonopidae	<i>Siphonops paulensis</i>	470	16.3237	23.7	15.60	1639	82	618
Typhlonectidae	<i>Atretochoana eiselti</i>	805	4.94	26.50	12.00	2239.50	62.50	807.32
Typhlonectidae	<i>Chthonerpeton arii</i>	493	5.1567	27.6	12.50	764	109	556
Typhlonectidae	<i>Chthonerpeton indistinctum</i>	440	30.8616	18.3	24.40	1478	14	665
Typhlonectidae	<i>Chthonerpeton noctinectes</i>	345	11.83	25.1	12.50	1533	50	880
Typhlonectidae	<i>Chthonerpeton onorei</i>	519	0.0789	19.4	12.40	3194	18	838
Typhlonectidae	<i>Chthonerpeton perissodus</i>	365	15.64	23.80	21.30	953.00	96.00	704.24
Typhlonectidae	<i>Chthonerpeton tremembe</i>	290	2.85	27.40	12.20	1302.00	105.00	629.49
Typhlonectidae	<i>Chthonerpeton viviparum</i>	558	26.3020	21.1	16.20	1722	36	734
Typhlonectidae	<i>Nectocaecilia petersii</i>	620	2.5985	26.7	13.20	3492	34	1115
Typhlonectidae	<i>Potamotyphlus kaupii</i>	695	3.2391	26.7	10.40	2366	29	908
Typhlonectidae	<i>Typhlonectes compressicauda</i>	800	3.6773	27.2	10.40	2135	41	915
Typhlonectidae	<i>Typhlonectes natans</i>	630	8.0783	28.4	12.40	2086	62	903
Indotyphlidae	<i>Hypogeophis pti</i>	121	4.34	26.17	6.20	2171.33	48.00	1133.33

Appendix 2

List of references from which data for this paper were collected.

Supplementary References

- Balakrishna, T. A., K. R. Gundappa, and K. Shakuntala. 1983. Observations on the eggs and embryo of *Ichthyophis malabarensis* (Taylor) (Apoda: Amphibia). *Current Science* 52:990-991.
- Barrio, A. 1969. Observaciones sobre *Chthonerpeton indistinctum* (Gymnophiona, Caeciliidae) y su reproduccion. *Physis* 28:400-503.
- Bartlett, R.D. & Bartlett, P.P. (2003). *Reptiles and amphibians of the Amazon*. University Press of Florida, Gainesville.
- Bei, Y., S. Meng, G. Li, W. Xie, J. Li, and L. Zhang. 2012. First record of nest site and egg guarding in the caecilian *Ichthyophis bannanicus* (Amphibia: Gymnophiona: Ichthyophiidae). *J. Nat. Hist.* 46:859-865.
- Bhatta G, Dinesh KP, Prashanth, Kulkarni N, Radhakrishnan C 2011 A new caecilian *Ichthyophis davidi* sp. nov. (Gymnophiona: Ichthyophiidae):the largest striped caecilian from the Western Ghats. *Current Science* 101: 1015-1019.
- Bhatta, G. & Prashanth, P. (2004) *Gegeneophis nadkarnii* – a caecilian (Amphibia: Gymnophiona: Caeciliidae) from Bondla Wildlife Sanctuary, Western Ghats. *Current Science*, 87, 388-391.
- Bhatta, G. & Srinivasa, R. (2004) A new species of *Gegeneophis* Peters (Amphibia: Gymnophiona: Caeciliidae) from the surroundings of Mookambika Wildlife Sanctuary, Karnataka, India. *Zootaxa*, 644, 1-8.
- Bhatta, G. 1999. Some aspects of general activity, foraging and feeding in *Ichthyophis beddomei* (Peters) and *Ichthyophis malabarensis* (Taylor) (Apoda: Ichthyophiidae) in captivity. *Zoo's Print J.* 14:23-26.
- Bhatta, G., Dinesh, K.P., Prashanth, P. & Kulkarni, N.U. (2007a) A new species of *Gegeneophis* Peters (Amphibia: Gymnophiona: Caeciliidae) from Goa, India. *Zootaxa*, 1409, 51-59.
- Bhatta, G., Dinesh, K.P., Prashanth, P. & Kulkarni, N.U. (2007b) A new species of the Indian caecilian genus *Gegeneophis* Peters (Amphibia: Gymnophiona: Caeciliidae) from the surroundings of Mahadayi Wildlife Sanctuary, Western Ghats. *Current Science*, 93, 1442-1445.
- Brauer, A. 1897. Beiträge zur Kenntniss der Entwicklungsgeschichte und der Anatomie der Gymnophionen. *Zool. Jb. Anat.* 10:277-472.
- Brauer, A. 1899. Beiträge zur Kenntniss der Entwicklung und Anatomie der Gymnophionen. *Zool. Jb. Anat.* 12:477–508.
- Budzik KA, Żuwała K, Kupfer A, Gower DJ, Wilkinson M (2015) Diverse anatomy of the tongue and taste organs in five species of caecilian (Amphibia: Gymnophiona). *Zoologischer Anzeiger - A Journal of Comparative Zoology*, 257 : 103 - 109.
- Carey, J. R. & Judge, D.S. (2000). *Longevity records. Life spans of mammals, birds, amphibians, reptiles, and fish*. Odense University Press, Odense.
- Cei, J.M. (1980). *Amphibians of Argentina*. *Monitore Zoologico Italiano*, Florence.
- Channing, A. (2001). *Amphibians of Central and Southern Africa*. Cornell University Press, Ithaca.
- Channing, A. & Howell, K.M. (2006). *Amphibians of East Africa*. Cornell University Press, Ithaca.
- Cummins, L. W. 1985. Gilled young born to *Typhlonectes natans* (Amphibia: Gymnophiona). *Georgia J. Sci.* 43:11.

- De Bakker DM, Wilkinson M, Jensen B (2015) Extreme variation in the atrial septation of caecilians (Amphibia: Gymnophiona). *Journal of Anatomy*, 226 (1) : 1 - 12.
- De la Riva, I., Kohler, J., Lotters, S. & Reichle, S. (2000) Ten years of research on Bolivian amphibians: updated checklist, taxonomic problems, literature and iconography. *Rev. Esp. Herp.* 14: 19-164.
- Donnelly M, Wake M 2013 A New Microcaecilia (Amphibia: Gymnophiona) from Guyana with Comments on *Epicrionops niger*. *Copeia* 2013(2):223-231.
- Duellman, W. E., and Trueb, L. 1994. *Biology of Amphibians*. The Johns Hopkins University Press, Baltimore and London.
- Dunn, E.R. (1942) The American caecilians. *Bulletin of the Museum of Comparative Zoology*, 91, 437-450.
- Fei, L., Ye, C. Y., Huang, Y. S., Liu, M. Y., Wang, Y. S., and Li, J. 1999. *Atlas of Amphibians of China*. Henan Publishing House of Science and Technology, Zhengzhou.
- Gans, C. 1961. The first record of egg laying in the caecilian *Siphonops paulensis* Boettger. *Copeia* 1961:490-491.
- Geissler P, Poyarkov JR NA, Grismer L, Nguyen TQ, An HT, Neang T, Kupfer A, Ziegler T, Boehme W, Mueller H. (2015). New *Ichthyophis* species from Indochina (Gymnophiona, Ichthyophiidae): 1. The unstriped forms with descriptions of three new species and the redescriptions of *I. acuminatus* Taylor 1960, *I. youngorum* Taylor, 1960 and *I. laosensis* Taylor, 1969. *Organisms Diversity & Evolution*, 15, 143-174.
- Giri, V., Gower, D. J., Gaikwad, K., Wilkinson, M. (2011): A second species of *Gegeneophis* Peters (Amphibia: Gymnophiona: Caeciliidae) lacking secondary annular grooves. *Zootaxa* 2815: 49-58.
- Giri, V., Wilkinson, M. & Gower, D.J. (2003) A new species of *Gegeneophis* Peters (Amphibia: Gymnophiona: Caeciliidae) from the Western Ghats of southern Maharashtra, India, with a key to the species of the genus. *Zootaxa*, 351, 1-10.
- Göldi, E. A. 1899. Ueber die Entwicklung von *Siphonops annulatus*. *Zool. Jb., Abt. Syst. Ökol. Geogr. d. Tiere* 12:170-173.
- Gower DJ, Kouete MT, Doherty-Bone TM, Ndeme ES, Wilkinson M (2015) Rediscovery, natural history, and conservation status of *Idiocranium russeli* Parker, 1936 (Amphibia: Gymnophiona: Indotyphlidae). *Journal of Natural History*, 49: 233-253.
- Gower, D. J., A. Rajendran, R. A. Nussbaum, and M. Wilkinson. 2008. A new species of *Uraeotyphlus* (Amphibia: Gymnophiona: Uraeotyphlidae) of the malabaricus group. *Herpetologica* 64:235-245.
- Gower, D. J., M. Dharne, G. Bhatta, V. Giri, R. Vyas, V. Govindappa, O. V. Oommen, J. George, Y. Shouche, and M. Wilkinson. 2007. Remarkable genetic homogeneity in unstriped, long-tailed *Ichthyophis* (Amphibia: Gymnophiona: Ichthyophiidae) along 1500 km of the Western Ghats, Indian *Journal of Zoology*, 272:266-275.
- Gower, D. J., M. Wilkinson, E. Sherratt, and P. J. R. Kok. 2010. A new species of *Rhinatrema* Duméril & Bibron (Amphibia: Gymnophiona: Rhinatrematidae) from Guyana. *Zootaxa* 2391: 47–60.
- Gower, D.J. & Wilkinson, M. (2005) Conservation biology of caecilian amphibians. *Conservation Biology*, 19, 45-55.
- Gower, D.J., Bhatta, G., Giri, V., Oommen, O.V., Ravichandran, M.S. & Wilkinson, M. (2004) Biodiversity in the Western Ghats: the discovery of new species of caecilian amphibians. *Current Science*, 87, 739-740.

- Gower, D.J., Giri, V. & Wilkinson, M. (2007) Rediscovery of *Gegeneophis seshachari* Ravichandran, Gower & Wilkinson (Amphibia: Gymnophiona: Caeciliidae) at the type locality. *Herpetozoa*, 19, 121-127.
- Gower, D.J., Giri, V., Dharne, M.S. & Shouche, Y. (2008) Frequency of independent origins of viviparity among caecilians (Gymnophiona): evidence from the first 'live-bearing' Asian amphibian. *Journal of Evolutionary Biology*, 21, 1220-1226.
- Greef, C. R. 1884. Über *Siphonops thomensis* Barboza du Bocage. *Beiträge zur Kenntniss der Coecilien*. Sitz. Ges. Beförd. Gesam. Natur. Marburg 1:15-32.
- Hartigan A, Wilkinson M, Gower DJ, Streicher JW, Holzer AS, Okamura B (2016) Myxozoan infections of caecilians demonstrate broad host specificity and indicate a link with human activity. *International Journal for Parasitology*, 46 (5-6) : 375 - 381.
- Heinroth, O. 1915. Geburt von *Typhlonectes natans* (Blindwühle) im Aquarium. *Blätt. f. Aquarien- und Terrarienk.* 26:34.
- Jadhav, B. V. 2010. Ecology of *Ichthyophis bombayensis* (Gymnophiona: Amphibia) from Koyana region, Maharashtra, India 2:14-17.
- Jadhav, B. V., R. N. Raut, and N. Dahanukar. 2007. First report of prespawning and spawning behavior in *Ichthyophis* cf. *malabarensis* (Amphibia: Gymnophiona). *Zoo's Print J.* 22:2804.
- Jones, D. T., S. P. Loader, and D. J. Gower. 2006. Trophic ecology of East African caecilians (Amphibia: Gymnophiona), and their impact on forest soil invertebrates. *J Zoology* 269:117–126.
- Kamei RG, Gower DJ, Wilkinson M, Biju SD 2013 Systematics of the caecilian family Chikilidae (Amphibia: Gymnophiona) with the description of three new species of Chikila from northeast India. *Zootaxa* 3666: 401-435.
- Kamei RG, Wilkinson M, Gower DJ, Biju SD (2009) Three new species of striped *Ichthyophis* (Amphibia: Gymnophiona: Ichthyophiidae) from the northeast Indian states of Manipur and Nagaland. *Zootaxa* 2267: 26–42.
- Kamei, R. G., D. San Mauro, D. J. Gower, I. van Bocxlaer, E. Sherratt, A. Thomas, S. Babu, F. Bossuyt, M. Wilkinson, and S. D. Biju. 2012. Discovery of a new family of amphibians from Northeast India with ancient links to Africa. *Proc. Roy. Soc.* 279:2396-2401.
- Kohler, G. 2011. *Amphibians of Central America*. Herpeton Verlag, Germany. 378p.
- Kotharambath R, Gower DJ, Oommen OV, Wilkinson M 2012 A third species of *Gegeneophis* Peters (Amphibia: Gymnophiona; Indotyphlidae) lacking secondary annular grooves. *Zootaxa* 3272: 26-34.
- Kotharambath R, Wilkinson M, Oommen OV, Gower DJ (2015) A new species of Indian caecilian highlights challenges for species delimitation within *Gegeneophis* Peters, 1879 (Amphibia: Gymnophiona: Indotyphlidae). *Zootaxa*, 3948 (1) : 60 - 70.
- Kotharambath, R., R. S. Beyo, L. Divya, M. A. Akbarsha, and O. V Oommen. 2013. Caecilians-The Limbless Elusive Amphibians: In the Backdrop of Kerala Region of the Western Ghats. In: Singaravelan, N. (ed.) *Rare Animals of India*. Betham Science Publisher.
- Kouete TM, Wilkinson M, Gower DJ (2012) First reproductive observations for *Herpele Peters*, 1880 (Amphibia: Gymnophiona: Herpelidae): evidence of extended parental care and maternal dermatophagy in *H. squalostoma* (Stutchbury, 1836). *ISRN Zool* 2012: 7.
- Kouete, M. T., E. S. Ndeme, and D. J. Gower. 2013. Further observations of reproduction and confirmation of oviparity in *Herpele squalostoma* (Stutchbury, 1836) (Amphibia: Gymnophiona: Herpelidae). *Herpetology Notes* 6:583-586.

- Kupfer, A., H. Müller, M. M. Antoniazzi, C. Jared, H. Greven, R. A. Nussbaum, and M. Wilkinson. 2006. Parental investment by skin feeding in a caecilian amphibian. *Nature* 440:926-929.
- Kupfer, A., J. Nabhitabhata, and W. Himstedt. 2004. Reproductive ecology of female caecilian amphibians (genus *Ichthyophis*): a baseline study. *Biological Journal of the Linnean Society* 83:207–217.
- Kupfer, A., J. Nabhitabhata, and W. Himstedt. 2005a. Life history of amphibians in the seasonal tropics: habitat, community and population ecology of a caecilian (genus *Ichthyophis*). *J. Zoology* 266:237–247.
- Kupfer, A., J. Nabhitabhata, and W. Himstedt. 2005b. From water into soil: trophic ecology of a caecilian amphibian (Genus *Ichthyophis*). *Acta Oecologica* 28:95–105.
- Lee, J. C. 2000. *A Field Guide to the Amphibians and Reptiles of the Maya World*. Cornell University Press, Ithaca.
- Leong, T.-M. 2003. Noteworthy dietary records for *Caudacaecilia larutensis* and *Limnonectes kuhlii* from Maxwell's Hill, Peninsular Malaysia (Amphibia: Gymnophiona and Anura). *Hamadryad* 27:268-270.
- Liebermann, J. 1939. Distribución geográfica de los Cecílidos argentinos. *Physis* 16:83-88.
- Loader, S. P., M. Wilkinson, D. J. Gower, and C. A. Msuya. 2003. A remarkable young *Scolecophorus vittatus* (Amphibia: Gymnophiona: Scolecophoridae) from the North Pare Mountains, Tanzania. *J.Zoo.* 259:93-101.
- Maciel AO, Hoogmoed MS (2011) Notes on the Vertebrates of northern Pará, Brazil: a forgotten part of the Guianan Region, III. A new species of *Microcaecilia* (Amphibia: Gymnophiona: Caeciliidae). *Bol Mus Para Emilio Goeldi Ser Ciên Nat* 6: 67–72.
- Maciel AO, Hoogmoed MS (2011) Taxonomy and distribution of caecilian amphibians (Gymnophiona) of Brazilian Amazonia, with a key to their identification. *Zootaxa* 2984: 1–53.
- Maciel AO, Hoogmoed MS 2013 A new species of *Microcaecilia* (Amphibia: Gymnophiona: Siphonopidae) from the Guianan region of Brazil. *Zootaxa* 3693: 387-394.
- Maciel AO, Leite JM, Leite RRS, Leite JRSA, Cascon P 2015 A new species of *Chthonerpeton* Peters 1880 (Amphibia: Gymnophiona: Typhlonectidae) from the state of Piauí, northeastern Brazil. *Journal of Herpetology* 49:308-313.
- Maciel, A. O. 2009. *Taxonomia dos anfíbios da ordem Gymnophiona da Amazônia Brasileira*. Universidade Federal do Pará, Museu Paraense Emílio Goeldi, Belém.
- Maciel, A. O., B. V. de Moraes, F. A. C. do Nascimento, D. M. Borges-Nojosa, D. C. Lima, and others. 2013. First records of *Chthonerpeton arii* Cascon and Lima-Verde, 1994 (Amphibia: Gymnophiona:Typhlonectidae) out of the type locality. *Check List* 9:818-819.
- Maciel, A. O., J. O. Gomes, J. C. L. Costa, and G. V. Andrade. 2012. Diet, microhabitat use and an analysis of sexual dimorphism in *Caecilia gracilis* (Amphibia: Gymnophiona: Caeciliidae) from a riparian forest in the Brazilian cerrado. *J. Herpetol.* 46:47-50.
- Maciel, A. O., T. Mott, and M. S. Hoogmoed. 2009. A second species of *Brasilotyphlus* (Amphibia: Gymnophiona: Caeciliidae) from Brazilian Amazonia. *Zootaxa* 2226: 19–27.
- Maciel, A.O. & Hoogmoed, M.S. (2018). A new species of *Caecilia* Linnaeus, 1758 (Amphibia: Gymnophiona: Caeciliidae) from French Guiana. *Boletim do Museu Paraense Emílio Goeldi. Ciências Naturais*, 13, 13-18.

- Maddock ST, Briscoe AG, Wilkinson M, Waeschenbach A, San Mauro D, Day JJ, Littlewood DTJ, Foster PG, Nussbaum RA, Gower DJ (2016) Next-Generation Mitogenomics: A Comparison of Approaches Applied to Caecilian Amphibian Phylogeny. PLOS ONE, 11 (6) : e0156757 - e0156757.
- Maddock, S.T., Wilkinson, M., Nussbaum, R.A., Gower, D.J. (2017). A new species of small and highly abbreviated caecilian (Gymnophiona: Indotyphlidae) from the Seychelles island of Praslin, and a recharacterization of *Hypogeophis brevis* Boulenger, 1911. Zootaxa, 4329, 301-326.
- Malkmus, R., U. Manthey, G. Vogel, P. Hoffman, and J. Kosuch. 2002. Amphibians & Reptiles of Mount Kinabalu (North Borneo). ARG Gantner Verlag Kommanditgesellschaft, Ruggell, Germany.
- Malonza, P. K., and G. J. Measey. 2005. Life history of an African caecilian: *Boulengerula taitanus* Loveridge 1935 (Amphibia Gymnophiona Caeciliidae). Tropical Zoology 18:49–66.
- Malonza, P. K., and H. Müller. 2004. A Rediscovery After Two Decades: The Chagamwe Lowland Caecilian *Boulengerula changamwensis* Loveridge, 1932 (Amphibia: Gymnophiona: Caeciliidae). Journal of East African Natural History 93:57–61.
- Masood-Parveez, U., and V. B. Nadkarni. 1993. The Ovarian Cycle in an Oviparous Gymnophione Amphibian, *Ichthyophis beddomei* (Peters). Journal of Herpetology 27:59.
- Mathew R, Sen N 2009 Studies on caecilians (Amphibia: Gymnophiona: Ichthyophiidae) of North East India with description of three new species of *Ichthyophis* from Garo Hills, Meghalaya and additional information on *Ichthyophis garoensis* Pillai & Ravichandran, 1999. Rec Zool Survey India, Occ Papar 309:1-56.
- Matsui, M., K. Nishikawa, A. Sudin, and M. Mohamed. 2006. The first karyotypic report of the genus *Caudacaecilia* with comments on its generic validity (Amphibia, Gymnophiona, Ichthyophiidae). Copeia 2006: 256-260.
- McCranie, J. R., and L. D. Wilson. 2002. The amphibians of Honduras. Society for the Study of Amphibians and Reptiles, Ithaca, New York.
- Measey, G. J., D. J. Gower, O. V Oommen, and M. Wilkinson. 2004. A subterranean generalist predator: diet of the soil-dwelling caecilian *Gegeneophis ramaswamii* (Amphibia: Gymnophiona: Caeciliidae) in southern India. Comptes Rendus Biologies 327:65–76.
- Measey, G. J., D. J. Gower, O. V. Oommen, and M. Wilkinson. 2003. Quantitative surveying of limbless endogeic vertebrates - a case study of *Gegeneophis ramaswamii* (Amphibia: Gymnophiona) in southern India. App. Soil Ecol. 23:43-53.
- Milewski, A. 1917. Zur Kenntnis der Genera *Typhlonectes* Peters der Gymnophiona (Amphibia apoda). Naturwiss. Wochenschr. (N. F.) 16:33-39.
- Minton, S.A., Jr. 1972. Amphibians and Reptiles of Indiana. Monograph Number 3, Indiana Academy of Science, Indianapolis, Indiana.
- Minton, S.A., Jr. 2001. Amphibians and Reptiles of Indiana. Second edition. Indiana Academy of Science, Indianapolis, Indiana.
- Müller, H., O. V. Oommen, and P. Bartsch. 2005. Skeletal development of the directdeveloping caecilian *Gegeneophis ramaswamii* (Amphibia: Gymnophiona: Caeciliidae). Zoomorphol. 124:171-188.
- Ngo, B. V, N. T. Hoang, and C. D. Ngo. 2014. Diet of the Bannan Caecilian *Ichthyophis bannanicus* (Amphibia: Gymnophiona: Ichthyophiidae) in the Mekong Delta, Vietnam. Journal of Herpetology 48:506–513.

- Nishikawa K, Matsui M, Sudin A, Wong A 2013 A new striped Ichthyophis (Amphibia: Gymnophiona) from Mt. Kinabalu, Sabah, Malaysia. *Curr Herpetol* 32: 159-169.
- Nishikawa K, Matsui M, Yambun P 2012 A new unstriped Ichthyophis (Amphibia: Gymnophiona: Ichthyophiidae) from Mt. Kinabalu, Sabah, Malaysia. *Current Herpetology* 31: 67-77.
- Nishikawa, K., M. Matsui, and N. L. Orlov. 2012a. A New Striped Ichthyophis (Amphibia: Gymnophiona: Ichthyophiidae) from Kon Tum Plateau, Vietnam. *Current Herpetology* 31:28–37.
- Nishikawa, K., M. Matsui, H.-S. Yong, N. Ahmad, P. Yambun, D. M. Belabut, A. Sudin, A. Hamidy, N. L. Orlov, H. Ota, N. Yoshikawa, A. Tominaga, and T. Shimada. 2012b. Molecular phylogeny and biogeography of caecilians from Southeast Asia (Amphibia, Gymnophiona, Ichthyophiidae), with special reference to high cryptic species diversity in Sundaland. *Molecular Phylogenetics and Evolution* 63:714–723.
- Nishikawa, K., M. Matsui, P. Y. Imbun, M. B. Lakim, and M. Mohamed. 2008. Field observation of egg brooding in the caecilian *Caudacaecilia asplenia* from Sabah, Malaysia (Amphibia: Gymnophiona: Ichthyophiidae). *The Raffles Bulletin of Zoology* 56:205-208.
- Nussbaum RA, Hoogmoed MS (1979) Surinam caecilians, with notes on *Rhinatrema bivittatum* and the description of a new species of *Microcaecilia* (Amphibia, Gymnophiona). *Zool Meded* 54: 217–235.
- Nussbaum, R. A. 1977. *Rhinatremitidae*: a new family of caecilians (Amphibia: Gymnophiona). *Occasional Papers of the Museum of Zoology University of Michigan* 682:1-30.
- Nussbaum, R. A., and H. Hinkel. 1994. Revision of East African Caecilians of the Genera *Afrocaecilia* Taylor and *Boulengerula* Tornier (Amphibia: Gymnophiona: Caeciliidae). *Copeia* 1994:750-760.
- Nussbaum, R. A., and M. E. Pfrender. 1998. Revision of the African caecilian genus *Schistometopum* Parker (Amphibia: Gymnophiona: Caeciliidae). *Miscellaneous publications of the Museum of Zoology University of Michigan* 187.
- Nussbaum, R. A., and M. Wilkinson. 1987. Two new species of *Chthonerpeton* (Amphibia: Gymnophiona: Typhlonectidae) from Brazil. *Occasional Papers of the Museum of Zoology, University of Michigan* 716: 1–15.
- Nussbaum, R. A., and M. Wilkinson. 1989. On the classification and phylogeny of caecilians (Amphibia: Gymnophiona), a critical review. *Herpetol. Monogr.* 3:1-42.
- Nussbaum, R.A. 1985. Systematics of caecilians (Amphibia: Gymnophiona) of the family *Scolecophoridae*. *Occasional Papers of The Museum of Zoology University of Michigan* 713:1-49.
- Oommen, O. V., G. J. Measey, D. J. Gower, and M. Wilkinson. 2000. Distribution and abundance of the caecilian *Gegeneophis ramaswamii* (Amphibia: Gymnophiona) in southern Kerala. *Curr. Sci.* 79:1386-1389.
- Parker, H. W. 1941. The caecilians of the Seychelles. *Ann. Mag. Nat. Hist.* 7:1-17.
- Parker, H. W. 1956. Viviparous caecilians and amphibian phylogeny. *Nature* 178:250-252.
- Parker, H. W. 1958. Caecilians of the Seychelles islands with description of a new subspecies. *Copeia* 1958:71-76.
- Parker, H. W., and E. R. Dunn. 1964. Dentitional metamorphosis in the Amphibia. *Copeia* 1964:75-86.
- Pillai, R. S., and M. S. Ravichandran. 2005. Gymnophiona (Amphibia) of India. *Zoological Survey of India*.
- Pough, F. H., Andrews, R. M., Cadle, J. E., Crump, M. L., Savitzky, A. H., and Wells, K. D. 2004. *Herpetology*. Prentice Hall, New Jersey.

- Ravichandran, M. S., D. J. Gower, and M. Wilkinson. 2003. A new species of *Gegeneophis* Peters (Amphibia: Gymnophiona: Caeciliidae) from Maharashtra, India. *Zootaxa* 350: 1–8.
- Renous S (1990) Morphologie cranienne d'un Siphonopidé américain, *Microcaecilian unicolor* (Amphibien, Gymnophione) et interprétation fonctionnelle. *Gegenbaurs Morphol Jahrb* 136: 781–806.
- San Mauro D, Gower DJ, Müller H, Loader SP, Zardoya R, Nussbaum RA, Wilkinson M (2014) Life-history evolution and mitogenomic phylogeny of caecilian amphibians. *Molecular Phylogenetics and Evolution*, 73 : 177 - 189.
- Savage, J. M. 2002. *The Amphibians and Reptiles of Costa Rica*. University of Chicago Press, Chicago and London.
- Savage, J. M., and M. H. Wake. 2001. Reevaluation of the Status of Taxa of Central American Caecilians (Amphibia: Gymnophiona), with Comments on Their Origin and Evolution. *Copeia* 2001:52–64.
- Seshachar, B. R. 1942. The eggs and embryos of *Gegenophis carnosus* Bedd. *Curr. Sci.* 11:439-441.
- Sherratt E, Gower DJ, Klingenberg CP, Wilkinson M (2014) Evolution of Cranial Shape in Caecilians (Amphibia: Gymnophiona). *Evolutionary Biology*, 41 (4) : 528 - 545.
- Silva, H. R. da, M. C. de Britto-Pereira, and U. Caramaschi. 2003. A new species of *Chthonerpeton* (Amphibia: Gymnophiona: Typhlonectidae) from Bahia, Brazil. *Zootaxa* 381: 1–11.
- Summers, A. P., and M. H. Wake. 2001. Clarification Regarding the Holotype of *Caecilia volceni* (Amphibia: Gymnophiona). *Copeia* 2001:561–562.
- Tapley B, Bryant Z, Grant S, Kother G, Feltret Y, Masters N, Strike T, Wilkinson M, Gower DJ (2014) Towards evidence-based husbandry for caecilian amphibians: Substrate preference in *Geotrypetes seraphini* (Amphibia: Gymnophiona: Dermophiidae). *The Herpetological Bulletin*, 129 : 15 - 18.
- Taylor EH (1968) *The caecilians of the world: a taxonomic review*. Lawrence: University of Kansas Press. 848 p.
- Taylor, E. 1973. A caecilian miscellany. *University of Kansas Science Bulletin* 50:187-231.
- Taylor, E. H. 1955. Additions to the fauna of Costa Rica. *Uni. Kansas Sci. Bull.* 37:499-575.
- Taylor, E. H. 1969. A new caecilian from Brasil. *University of Kansas Science Bulletin* 48: 307–313.
- Taylor, E. H. 1970. A new caecilian from Ethiopia. *University of Kansas Publications*.
- Taylor, E. H. 1970. The lateral-line sensory system in the caecilian family, *Ichthyophiidae* (Amphibia: Gymnophiona). *Uni. Kansas Sci. Bull.* 48:861-868.
- Taylor, E. H. 1971. The caecilian fauna of Thailand, with an examination of scale characters. *Natural History Bulletin of the Siam Society* 24:33-39.
- Taylor, E. H. 1973. A caecilian miscellany. *University of Kansas Science Bulletin* 50: 187–231.
- Teodecki, E. E., E. D. Brodie Jr, D. R. Formanowicz Jr, and R. A. Nussbaum. 1998. Head dimorphism and burrowing speed in the African caecilian *Schistometopum thomense* (Amphibia: Gymnophiona). *Herpetologica*:154-160.
- Vassilieva, A.B., Galoyan, E.A., Poyarkov, N.A. & Geissler, P. (2016). A photographic field guide to the amphibians and reptiles of the lowland monsoon forests of Southern Vietnam. Edition Chimaira, Frankfurt and Main.
- Vyas, R. 2004. Notes on the distribution and natural history of *Ichthyophis bombayensis* (Gymnophiona: Ichthyophiidae). *Hamadryad* 28:130-136.
- Wake, M. H. 1977a. The reproductive biology of caecilians: an evolutionary perspective Pp. 73-101 in D. H. Taylor and S. I. Guttman, eds. *Reproductive Biology of Amphibians*, Plenum Press, New York.

- Wake, M. H. 1977b. Fetal maintenance and its evolutionary significance in the Amphibia: Gymnophiona. *J. Herpetol.* 11:379-386.
- Wake, M. H. 1992. Reproduction in caecilians. Pp.112–120 in W. C. Hamlett. ed. *Reproductive biology of South American vertebrates*. Springer, New York.
- Wake, M. H. 1993. Evolution of oviductal gestation in amphibians. *J. Exp. Zool.* 266:394-413.
- Wake, M. H., and M. A. Donnelly. 2009. A new lungless caecilian (Amphibia: Gymnophiona) from Guyana. *Proceedings of the Royal Society B: Biological Sciences* 277:915–922.
- Wells, K. D. 2007. *The Ecology and Behavior of Amphibians*. University of Chicago Press.
- Wilkinson M, Antoniazzi MM, Jared C (2015) A new species of *Microcaecilia* Taylor, 1968 (Amphibia: Gymnophiona: Siphonopidae) from Amazonian Brazil. *Zootaxa*, 3905: 425 - 431.
- Wilkinson M, Malonza PK, Campbell P, Loader SP. (2017). A new species of *Boulengerula* Tornier, 1896 (Amphibia: Gymnophiona: Herpelidae) from Kenya and the "rediscovery" of *Boulengerula denhardtii*. *Zootaxa* 4286: 525-534.
- Wilkinson M, Nussbaum R, Hoogmoed M (2009) A new species of *Microcaecilia* (Amphibia: Gymnophiona: Caeciliidae) from Suriname. *Herpetologica* 65:413-418.
- Wilkinson M, Presswell B, Sherratt E, Papadopoulou A, Gower DJ 2014 A new species of striped *Ichthyophis* Fitzinger, 1826 (Amphibia: Gymnophiona: Ichthyophiidae) from Myanmar. *Zootaxa* 3785: 45-58.
- Wilkinson M, Sherratt E, Starace F, Gower DJ (2013) A New Species of Skin-Feeding Caecilian and the First Report of Reproductive Mode in *Microcaecilia* (Amphibia: Gymnophiona: Siphonopidae). *PLoS ONE* 8(3): e57756.
- Wilkinson, M. & Gower, D. J. 2010. A new species of *Rhinatrema* (Amphibia: Gymnophiona: Rhinatrematidae) from Amazonas, Brazil. *Zootaxa* 2650:63-68.
- Wilkinson, M. & Kok, P. J. R. 2010. A new species of *Microcaecilia* (Amphibia: Gymnophiona: Caeciliidae) from Guyana. *Zootaxa* 2719:35-40.
- Wilkinson, M. & Nussbaum, R. A. 1988. *Ichthyophiidae* Taylor, 1968 (Amphibia: Gymnophiona): proposed conservation. *Bulletin of Zoological Nomenclature* 45:207-209.
- Wilkinson, M. & Nussbaum, R. A. 1988. On the type locality of *Chthonerpeton corrugatum* Taylor (Amphibia: Gymnophiona). *Herpetological Journal* 1: 245-246.
- Wilkinson, M. & Nussbaum, R. A. 1992. Taxonomic status of *Pseudosiphonops ptychodermis* Taylor and *Mimosiphonops vermiculatus* Taylor (Amphibia: Gymnophiona: Caeciliidae), with description of a new species. *Journal of Natural History* 26:675-688.
- Wilkinson, M. & Nussbaum, R. A. 1997. Comparative morphology and evolution of the lungless caecilian *Atretochoana eiselti* (Taylor) (Amphibia: Gymnophiona: Typhlonectidae). *The Biological Journal of the Linnean Society* 62:39-109.
- Wilkinson, M. & Nussbaum, R. A. 1998. Caecilian viviparity and amniote origins. *Journal of Natural History* 32:1403-1409.
- Wilkinson, M. & Nussbaum, R. A. 1999. Evolutionary relationships of the lungless caecilian *Atretochoana eiselti* (Amphibia: Gymnophiona: Typhlonectidae). *Zoological Journal of the Linnean Society* 126:91-123.
- Wilkinson, M. & Nussbaum, R. A. 2006. Caecilian phylogeny and classification. In J.-M. Exbrayat (Ed.) *Reproductive Biology and Phylogeny of Amphibia*, Volume 3. Gymnophiona. Science Publishers Inc. Pp. 39-78.

- Wilkinson, M. 1981. Notes on a caecilian. *Nectocaecilia* sp. *Herptilia* 5:22-25.
- Wilkinson, M. 1983. An introduction to the caecilians. *Herptilia* 8:43-47.
- Wilkinson, M. 1988. The status of *Nectocaecilia cooperi* Taylor, with comments on the genus *Nectocaecilia* Taylor (Amphibia: Gymnophiona). *Journal of Herpetology* 22:119-121.
- Wilkinson, M. 1989. On the status of *Nectocaecilia fasciata* Taylor, with a discussion of the phylogeny of the Typhlonectidae (Amphibia: Gymnophiona). *Herpetologica* 45:23-36.
- Wilkinson, M. 1991. Adult tooth crown morphology in the Typhlonectidae (Amphibia: Gymnophiona): a reinterpretation of variation and its significance. *Zeitschrift für zoologische Systematische und Evolutionsforschung* 29:304-311.
- Wilkinson, M. 1992. Novel modification of the tetrapod cardiovascular system in the West African Caecilian *Herpele squalostoma* (Amphibia: Gymnophiona: Caeciliidae). *Journal of Zoology* 228:277-286.
- Wilkinson, M. 1992. On the life history of the caecilian genus *Uraeotyphlus* (Amphibia: Gymnophiona). *Herpetological Journal* 2:121-124.
- Wilkinson, M. 1992. The phylogenetic position of the Rhinatrematidae (Amphibia: Gymnophiona): evidence from the larval lateral line system. *Amphibia-Reptilia* 13: 74-79.
- Wilkinson, M. 1996. Resolution of the taxonomic status of *Nectocaecilia haydee* (Roze) and a key to the genera of the Typhlonectidae (Amphibia: Gymnophiona). *Journal of Herpetology* 30:413-415.
- Wilkinson, M. 1996. The heart and aortic arches of rhinatrematid caecilians (Amphibia: Gymnophiona). *The Zoological Journal of the Linnean Society* 118:135-150.
- Wilkinson, M. 1996. The taxonomic status of *Typhlonectes venezuelense* Fuhrmann (Amphibia: Gymnophiona: Typhlonectidae). *The Herpetological Journal* 6:30-31.
- Wilkinson, M. 1997. Characters, congruence and quality: a study of neuroanatomical and traditional data in caecilian phylogeny. *Biological Reviews* 72:423-470.
- Wilkinson, M., Sebben, A., Schwartz, E. N. F. & Schwartz, C. 1998. The largest lungless tetrapod: report on a second specimen of the lungless caecilian *Atretochoana eiselti* (Amphibia: Gymnophiona: Typhlonectidae) from Brazil. *Journal of Natural History* 32:617-627.
- Wilkinson, M., Gower, D. J., Govindappa, V. & Venkatachalaiah. 2007. A new species of *Ichthyophis* (Amphibia: Gymnophiona: Ichthyophiidae) from Karnataka, India. *Herpetologica* 63:511-518.
- Wilkinson, M., Kupfer, A., Marques-Porto, R., Jeffkins, H., Antoniazzi, M. M., Jared, C. 2008. One hundred million years of skin feeding? Extended parental care in a Neotropical caecilian (Amphibia: Gymnophiona). *Biology Letters* 4:358-361.
- Wilkinson, M., Loader, S. P., Gower, D. J., Sheps, J. A. & Cohen, B. L. 2003. Phylogenetic relationships of African caecilians (Amphibia: Gymnophiona): insights from mitochondrial rRNA gene sequences. *African Journal of Herpetology* 52:83-92.
- Wilkinson, M., Loader, S. P., Müller, H. & Gower, D. J. 2004. Taxonomic status and phylogenetic relationships of *Boulengerula denhardti* Nieden, 1912 (Amphibia: Gymnophiona: Caeciliidae). *Mitteilungen Mus. Natkd. Berlin, Zoologische Reihe*, 80:41-51.
- Wilkinson, M., McInerney, J. O., Hirt, R. P., Foster, P. & Embley, T. M. 2007. Of clades and clans: terms for relationships in unrooted trees. *Trends in Evolution and Ecology* 22:114-115.
- Wilkinson, M., R. A. Nussbaum, and M. S. Hoogmoed. (2010). A new species of *Microcaecilia* (Amphibia: Gymnophiona: Caeciliidae) from Suriname. *Herpetologica* 65: 413–418.

- Wilkinson, M., Richardson, M. K., Gower, D. J. & Oommen, O. V. 2002. Extended embryo retention, caecilian oviparity and amniote origins. *Journal of Natural History* 36:2185-2198.
- Wilkinson, M., San Mauro, D., Sherratt, E. & Gower, D. J. 2011. A nine-family classification of caecilian amphibians. *Zootaxa* 2874:41-64.
- Wilkinson, M., Varghese, S. & Oommen, O. V. 2000. Caecilians of Kerala. *Biodiversity India* 8-12:14.
- Wilkinson, M., Müller, H. & Gower, D. J. 2003. On *Herpele multiplicata* (Amphibia: Gymnophiona: Caeciliidae). *African Journal of Herpetology* 52: 119-122.
- Wolterstorff, W. 1915. Bemerkungen zu der Mitteilung von Dr. Heinroth über die Geburt von *Typhlonectes natans* I. G. Fisher im Aquarium. *Blätt. f. Aquarien- und Terrarienk.* 26:35.

!

!

!