

On-line Supplementary Data 4 – Ford and Benson 2019

Taxon list, sources, specimens examined and missing data

Taxon list for all Operational Terminal Units used in our analyses, with principle reference source(s) and accession numbers of specimens examined by DPF. Missing data is expressed as a percentage of the 294 characters used in our analyses for cranial, postcranial and all characters combined. For references see Supplementary Information 1.

Taxon	Primary references and specimens examined	Missing data %		
		Total	Cran.	Post
<i>Gephyrostegus bohemicus</i>	Brough, Brough and White 1967, Carroll 1970, Godfrey and Reisz 1991, Klembara <i>et al.</i> 2014	53	40	79
<i>Seymouria</i> spp.	White 1939, Laurin 1996 Berman <i>et al.</i> 2000, Klembara <i>et al.</i> 2005 MCZ 1098, MCZ 1643, MCZ 1083 FMNH UC 666, FMNH C.145	24	24	24
<i>Tseajaia campi</i>	Moss 1972	27	29	22
<i>Limnoscelis paludis</i>	Romer 1946, Fracasso 1987, Berman <i>et al.</i> 2010 FMNH UC 676	24	25	21
<i>Oedaleops campi</i>	Langston 1965, Reisz <i>et al.</i> 2009, Sumida <i>et al.</i> 2014	58	55	65
<i>Eothyris parkeyi</i>	Reisz <i>et al.</i> 2009 MCZ 1161	54	32	100
<i>Vaughnictis smithae</i>	Brocklehurst <i>et al.</i> 2016 MCZ 2985	74	67	89
<i>Eocasea martini</i>	Reisz and Fröbisch 2014	74	80	61
<i>Euromycter rutena</i>	Sigogneau-Russell and Russell 1974	45	32	72
<i>Casea broilii</i>	Williston 1913, Romer and Price 1940, Olson 1968, LeBlanc and Reisz 2014 FMNH UC 656, FMNH UR 1011, FMNH UR 2512, FMNH UC 657	25	32	11

<i>Ennatosaurus tecton</i>	Olson 1968, Maddin <i>et al.</i> 2008	35	28	51
<i>Echinerpeton intermedium</i>	Reisz 1972 MCZ 4090,4091, 4092,4093,4094	82	87	72
<i>Archaeothyris florensis</i>	Reisz 1972,1975 MCZ 4079, 4085,4089	66	69	61
<i>Varanosaurus acutirostris</i>	Berman <i>et al.</i> 1995, Sumida 1990 FMNH PR 1670, FMNH UC 34	29	18	52
<i>Ophiacodon</i> spp.	Romer and Price 1940 MCZ 1203, 1206, 1350, 1366, 1435, 1486, 1971, 2934,4820, 4827, 4829, 4854, 4895, 4938, 5051, 5719, 5792, 5933, 5934, 5963, 6845, 7452	12	17	2
<i>Cutleria wilmarthi</i>	Lewis and Vaughn 1965, Laurin 1994	66	63	71
<i>Pantelosaurus saxonicus</i>	Romer and Price 1940, Spindler 2016	54	53	57
<i>Haptodus garnettensis</i>	Currie 1977, Laurin 1993 ROM 29872, 30099, 43601, 43602, 43603, 43604, 43605, 43606, 43607, 43608	20	22	18
<i>Secodontosaurus obtusidens</i>	Reisz <i>et al.</i> 1991, 1992, Fröbisch <i>et al.</i> 2010, MCZ 1124, 2028, 3427, 3628, 5203, 5064, 5355, 8677, 7013, 7080	29	15	82
<i>Dimetrodon</i> spp.	Romer and Price 1940 MCZ 1114, 1365, 4443, 4982, 6148, 7074	14	17	8
<i>Ianthasaurus hardestiorum</i>	Reisz and Berman 1986, Modesto and Reisz 1990, Mazierski and Reisz 2010 ROM 29941, 37751, 59933	59	55	68
<i>Edaphosaurus boanerges</i>	Modesto 1995 MCZ1531, 1680, 1762, 3417, 3420, 3421, 4309, 4315, 4316	19	22	16

<i>Archaeovenator hamiltonensis</i>	Reisz and Dilkes 2003 KUVV 12483	31	28	38
<i>Ascendonanus nestleri</i>	Spindler <i>et al.</i> 2018	50	50	50
<i>Aerosaurus</i> spp.	Langston and Reisz 1981, Pelletier 2014	30	33	22
<i>Apsisaurus witteri</i>	Laurin 1991, Reisz <i>et al.</i> 2010 MCZ 1474	72	77	60
<i>Heleosaurus scholtzi</i>	Carroll 1995, Reisz and Modesto 2007, Botha-Brink and Modesto 2007,2009	40	36	47
<i>Mesenosaurus romeri</i>	Reisz and Berman 2001	31	16	63
<i>Mycterosaurus longiceps</i>	Vaughn 1958, Berman and Reisz 1982 FMNH UC 692, FMNH UC169	41	34	55
<i>Elliotsmithia longiceps</i>	Dilkes and Reisz 1996, Reisz <i>et al.</i> 1998, Modesto <i>et al.</i> 2001	70	57	97
<i>Varanops brevirostris</i>	Maddin <i>et al.</i> 2006, Campione and Reisz 2010 FMNH UC 644, FMNH UR 2423, MCZ 1928, FMNH P 12841, FMNH UC 677	19	21	15
<i>Varanodon agilis</i>	Olson 1965 FMNH 986	44	43	47
<i>Watongia meieri</i>	Reisz and Laurin 2004	85	96	64
<i>Hylonomus lyelli</i>	Carroll 1964, Meyer and Anderson 2013 NHMUK R 4168	50	48	53
<i>Anthracodromeus longipes</i>	Carroll and Baird 1972	71	79	54
<i>Paleothyris acadiana</i>	Carroll 1969 MCZ 3481, 3482, 3483, 3485, 3486, 3487, 3489, 3490	24	29	15
<i>Protorothyris archeri</i>	Clark and Carroll 1973 MCZ 1532, 2148	39	29	60

<i>Petrolacosaurus kansensis</i>	Reisz 1981 KUVV 1424, 8351, 9951, 9952, 9957, 9958, 33603	13	16	7
<i>Araeoscelis</i> spp.	Williston 1913, Vaughn 1955, Reisz <i>et al.</i> 1984 MCZ 4380, 8828	23	28	13
<i>Orovenator mayorum</i>	Reisz <i>et al.</i> 2011, Ford and Benson 2018 OMNH 74606, 74607	52	31	96
<i>Youngina capensis</i>	Gow 1975, Currie 1980, Carroll 1981 BP/1/70, 2614, 2871, 3859	26	29	20
<i>Acerosodontosaurus piveteaui</i>	Currie 1980, Bickelmann <i>et al.</i> 2009 MNHN 1908-32-57	68	74	56
<i>Lanthanolania ivakhnenkoi</i>	Modesto and Reisz 2002	81	72	100
<i>Claudiosaurus germaini</i>	Carroll 1981 MNHN 1978-6-1, MNHN 1978-6-2	36	42	24
<i>Prolacerta broomi</i>	Gow 1975, Modesto and Sues 2004 BP/1/471, 2675, 4504, 5375, 5066, 588	22	24	19
<i>Proterosuchus</i> spp.	Wellman 1998, Ezcurra <i>et al.</i> 2013, 2015, Ezcurra 2016	34	31	39
<i>Thuringothyris malendorffae</i>	Müller <i>et al.</i> 2006	47	46	48
<i>Captorhinus aguti</i>	Fox and Bowman 1966, Modesto 1998, Holmes 2003 FMNH UC 242, 687, FMNH PR 912, 913, MCZ 1746, OMNH 15003, 52331, 56819	17	21	8
<i>Captorhinus laticeps</i>	Heaton 1979, Heaton and Reisz 1980 OMNH 15101, FMNH UC 701	42	21	84
<i>Labidosaurikos meachami</i>	Stovall 1950, Dodick and Modesto 1995	55	34	100
<i>Labidosaurus hamatus</i>	Modesto <i>et al.</i> 2007	49	26	95

<i>Protocaptorhinus pricei</i>	Clark and Carroll 1973 MCZ 1160, 1478	54	42	80
<i>Romeria</i> spp.	Clark and Carroll 1973 MCZ 1480, 1963	57	38	95
<i>Euconcordia cunninghami</i>	Müller and Reisz 2005, Reisz <i>et al.</i> 2016	61	42	100
<i>Reiszorhinus olsoni</i>	Sumida <i>et al.</i> 2010 FMNH UC 183	61	42	100
<i>Eudibamus cursoris</i>	Berman <i>et al.</i> 2000	76	80	69
<i>Mesosaurus tenuidens</i>	Modesto 2006, 2010, Piñeiro <i>et al.</i> 2012, 2016	28	35	15
<i>Stereosternum tumidum</i>	Modesto 1999a, Bickelmann and Tsuji 2018	57	67	38
<i>Erpetonyx arsenaultorum</i>	Modesto <i>et al.</i> 2015 ROM 55402	71	77	58
<i>Belebey vegrandis</i>	Reisz <i>et al.</i> 2007	52	31	96
<i>Macroleter poezicus</i>	Tsuji 2006	45	26	83
<i>Milleretta rubidgei</i>	Watson 1957, Gow 1972 BP/1/720, 3818, 3822	38	28	57
<i>Acleistorhinus pteroticus</i>	Daly 1969, deBraga and Reisz 1996 FMNH UR 1038	54	32	100
<i>Colobomycter pholeter</i>	Vaughn 1958b, Laurin and Reisz 1989, Modesto 1999b, MacDougall <i>et al.</i> 2016, 2017 FMNH UR 272, BMRP 2008.3.1, 2008.3.3, 2008.3.10	53	30	100
<i>Nyctiphruetus acudens</i>	Säilä 2010	49	34	79
<i>Emeroleter levis</i>	Tsuji <i>et al.</i> 2012	53	48	63
<i>Deltavjatia rossicus</i>	Tsuji 2013	30	21	49

<i>Procolophon trigoniceps</i>	Carroll and Lindsey 1985, deBraga 2003, Cisneros 2008 BP/1/962, 5927	30	32	25
<i>Candelaria barbouri</i>	Cisneros <i>et al.</i> 2004	71	57	100
<i>Owenetta kitchingorum</i>	Reisz and Scott 2002 BP/1/ 4195	36	24	60