

1 **Appendix 1.** Mean morphological values for the species examined here.

Species	N	SVL (mm)	HV (ml)	HW (mm)	HL (mm)	HH (mm)	JL (mm)	OL (mm)
Acrochordidae								
<i>Acrochordus</i>	15	538.9	1.0	10.6	12.2	8.4	13.4	9.8
<i>arafurae</i>								
<i>A. granulatus</i>	4	639.0	3.0	15.1	18.8	14.5	20.0	18.4
<i>A. javanicus</i>	3	449.0	1.0	14.2	15.8	12.3	20.2	17.7
Boinae								
<i>Candoia aspera</i>	3	472.0	5.0	16.8	20.5	13.3	28.1	22.0
<i>C. bibroni</i>	3	565.0	2.0	11.8	14.2	9.6	23.1	19.3
<i>C. carinata</i>	3	666.0	15.0	25.4	28.1	18.5	44.8	31.3
<i>Charina bottae</i>	3	280.0	1.0	7.4	9.6	6.5	13.3	10
<i>Corallus caninus</i>	3	960.0	12.0	26.1	29.3	18.5	39.4	37.0
<i>C. enhydris</i>	3	1270.0	13.0	22.8	24.3	17.3	32.7	29.7
<i>Epicrates cenchria</i>	3	1170.0	12.0	24.8	25.3	18.4	35.5	33.4
<i>E. fordi</i>	3	535.0	1.0	12.5	10.4	8.4	16.2	12.5
<i>E. maurus</i>	3	858.0	4.0	17.6	14.3	16.5	30.6	23.5
<i>Eunectes murinus</i>	3	3350.0	180.0	83.4	71.2	46.4	92.1	72.0
Elapinae								
<i>Acanthopis antarcticus</i>	3	338.0	3.0	17.6	17.6	11.2	25.7	16.8
<i>Aspidelaps sculatatus</i>	3	515.0	7.0	23.2	23.2	18.2	23.0	20.5
<i>Bungarus multicinctus</i>	3	759.6	4.0	17.4	17.4	11.9	22.4	17.6
<i>B. fasciata</i>	3	1226.9	9.3	24.4	24.4	15.4	24.3	22.4
<i>Cryptophis pallidiceps</i>	3	591.0	1.0	12.3	12.3	7.8	16.8	9.7
<i>Denisonia maculata</i>	3	315.0	1.0	8.8	8.8	6.1	13.5	7.9
<i>Drysdalia mastersii</i>	3	330.0	1.0	8.2	8.2	6.7	14.4	7.6
<i>Dendroaspis polylepis</i>	3	1450.0	10.0	23.5	23.5	13.2	30.0	30.5
<i>D. viridis</i>	3	1123.2	4.0	14.5	14.5	12.8	35.5	29.4
<i>Elapsoidea nigra</i>	3	491.0	2.0	11.0	11.0	7.7	13.6	12.1
<i>E. sundevalli</i>	3	503.1	1.0	12.5	12.5	8.3	15.8	11.4
<i>Furina diadema</i>	3	214.0	1.0	5.5	5.5	4.2	8.7	3.8
<i>Hemiaspis damelii</i>	3	330.0	1.0	8.5	8.5	5.1	13.9	8.2
<i>Leptocrotus rarducii</i>	3	291.6	1.0	5.3	5.3	3.3	6.0	5.0
<i>Maticora intestinalis</i>	3	285.3	1.0	4.9	4.8	4.0	8.0	5.3
<i>Micruroides euryxanthus</i>	3	371.7	1.0	6.3	6.3	4.3	8.4	5.9
<i>Micrurus annellata</i>	3	585.0	1.0	11.3	11.3	6.4	12.1	11.3
<i>M. diastema</i>	3	589.5	1.5	11.7	11.7	8.1	14.1	12.4
<i>M. fulvius</i>	3	450.7	1.0	10.8	10.8	8.9	17.1	11.9
<i>M. langsdorffi</i>	3	538.5	1.0	11.3	11.3	8.5	15.4	11.2
<i>M. mertensi</i>	3	288.1	1.0	6.0	6.0	3.9	10.3	6.0
<i>M. nigrocinctus</i>	3	693.9	1.5	11.7	11.7	8.6	20.9	13.3
<i>M. ruatanus</i>	3	535.2	1.0	8.8	8.8	6.6	16.2	10.2
<i>M. spixi</i>	3	923.8	3.0	14.8	14.8	10.5	24.3	14.3
<i>M. surinamensis</i>	3	870.3	7.0	20.7	20.7	14.7	23.4	20.1
<i>Naja atra</i>	3	1145.5	18.0	26.3	26.3	17.1	62.9	32.7
<i>N. kaouthia</i>	3	550.9	3.5	16.6	16.6	13.4	33.8	18.6
<i>N. melanoleuca</i>	3	686.2	4.0	18.3	18.3	12.6	31.6	22.4
<i>N. nigricollis</i>	3	683.5	6.0	23.8	23.8	14.4	32.6	23.1
<i>N. samarensis</i>	3	801.6	7.0	19.9	19.9	12.2	31.3	19.7
<i>Ophiophagus hannah</i>	3	1647.0	9.0	23.9	23.9	17.0	42.7	29.3
Homolapsinae								
<i>Cerberus rynchops</i>	13	499.3	4.8	17.1	17.1	11.5	21.7	15.3
<i>Enhydris pakistanica</i>	5	358.0	0.3	10.3	10.5	6.8	12.4	9.9
<i>E. polylepis</i>	8	499.3	0.3	17.1	17.0	11.5	21.7	15.3
<i>Fordonia leucobalia</i>	9	581.5	4.0	22.7	18.5	16.0	23.6	19.7
<i>Homalopsis buccata</i>	3	588.9	3.5	16.7	16.1	13.9	28.1	17.2

Erycinae								
<i>Calabaria reinhardtii</i>	3	702.0	4.0	14.6	14.9	14.6	24.5	15.2
<i>Eryx johnii</i>	3	690.0	4.0	14.8	18.0	15.5	21.8	15.7
Hydrophiinae								
<i>Aipysurus laevis</i>	3	374.0	2.0	14.5	14.5	12.9	19.2	9.9
<i>Enhydrina schistose</i>	3	331.0	1.0	10.0	10.0	6.6	14.9	10.3
<i>Hoplocephalus bitorquatus</i>	3	566.0	2.0	16.5	19.7	11.0	26.2	17.7
<i>Hydrophis caeruleus</i>	3	512.0	1.0	8.4	11.7	7.6	13.7	9.5
<i>H. cyanocinctus</i>	3	1083.5	2.0	12.2	17.9	11.6	23.5	14.4
<i>H. fasciatus</i>	3	610.4	1.0	6.7	11.0	5.6	12.3	7.8
<i>H. lapemoides</i>	3	676.0	3.0	12.5	16.8	10.1	20.3	11.6
<i>H. torquatus</i>	3	497.0	6.0	17.4	20.5	18.8	28.3	16.2
<i>Lapemis curtus</i>	3	755.6	9.9	23.5	25.5	20.1	36.0	22.1
Laticaudinae								
<i>Laticauda colubrinus</i>	4	729.2	3.7	16.0	15.2	11.6	18.2	13.9
<i>L. laticauda</i>	4	761.1	4.0	8.7	9.0	7.9	9.9	8.8
Natricinae								
<i>Nerodia clarkii</i>	28	456.4	1.5	12.5	18.6	9.8	21.8	17.7
<i>N. cyclopion</i>	15	492.4	4.5	15.9	21.4	11.5	27.1	20.9
<i>N. erythrogaster</i>	17	506.9	4.4	16.3	23.7	12.1	26.9	22.4
<i>N. fasciata</i>	89	427.5	2.2	14.0	19.7	10.2	23.6	19.5
<i>N. harteri</i>	9	430.3	1.5	11.0	16.7	8.2	21.0	17.7
<i>N. rhombifer</i>	21	547.9	6.0	18.5	22.3	13.5	28.7	23.1
<i>N. sipedon</i>	19	445.7	3.2	13.8	18.8	10.2	22.8	19.0
<i>N. taxispilota</i>	15	538.1	4.7	17.8	20.1	12.2	26.4	22.1
<i>Natrix megaloccephala</i>	3	813.4	12.0	24.4	29.3	17.1	36.8	30.6
<i>N. natrix</i>	8	505.4	2.6	13.5	17.0	10.3	21.2	18.1
<i>N. tessalata</i>	9	610.0	2.2	13.7	19.7	11.4	23.0	19.6
<i>Regina alleni</i>	3	280.0	0.3	8.2	12.2	7.1	12.2	12.2
<i>R. grahami</i>	3	533.3	0.7	10.9	13.9	8.0	14.9	14.7
<i>R. rigida</i>	3	419.0	2.0	13.1	14.9	8.8	16.7	15.6
<i>R. septemvittata</i>	3	410.7	0.5	9.7	14.2	7.4	14.5	13.4
<i>Storeia dekayi</i>	3	267.3	0.3	6.6	9.2	4.4	9.3	8.1
<i>S. occipitamaculata</i>	3	166.0	0.3	5.1	6.9	3.7	6.6	6.6
<i>Seminatrix</i>	4	269.3	1.0	8.2	10.4	5.9	11.0	9.1
<i>Thamnophis atratus</i>	20	405.2	1.4	10.3	15.3	7.5	18.3	15.9
<i>T. brachystoma</i>	4	274.7	0.0	6.1	9.7	5.2	10.9	8.6
<i>T. butleri</i>	4	283.3	0.0	7.2	11.9	6.0	13.7	10.5
<i>T. chrysocephalus</i>	3	437.7	1.3	10.8	16.6	8.7	18.4	17.0
<i>T. couchii</i>	18	477.7	2.2	11.7	17.0	9.0	22.3	18.0
<i>T. cyrtopis</i>	3	454.6	2.9	13.8	17.8	9.8	21.9	19.2
<i>T. elegans</i>	23	400.7	1.2	10.6	14.4	7.8	17.0	15.0
<i>T. eques</i>	3	472.1	1.3	11.0	15.5	9.0	19.7	16.5
<i>T. errans</i>	3	417.0	1.7	12.1	16.7	8.4	18.2	16.7
<i>T. exsul</i>	3	383.9	1.1	10.1	15.2	7.4	16.6	14.9
<i>T. fulvus</i>	3	413.4	1.3	16.4	13.1	8.9	17.6	17.3
<i>T. gigas</i>	9	723.2	11.0	20.5	27.5	15.3	35.6	29.6
<i>T. godmani</i>	5	403.7	1.9	12.2	16.2	8.2	16.9	15.7
<i>T. hammondii</i>	6	514.7	2.7	13.0	19.0	10.2	23.6	19.3
<i>T. marcianus</i>	9	434.9	2.5	14.0	17.4	9.3	21.1	18.6
<i>T. melanogaster</i>	8	311.4	1.8	9.7	13.9	7.5	17.1	14.3
<i>T. mendax</i>	5	409.2	1.9	12.8	16.5	8.6	17.6	17.2
<i>T. nigronuchalis</i>	3	433.3	1.7	12.2	16.7	8.3	16.3	17.5
<i>T. ordinoides</i>	8	297.4	0.3	9.6	12.9	6.4	14.7	12.6
<i>T. proximus</i>	22	437.1	1.1	8.6	14.4	7.0	16.2	14.6
<i>T. radix</i>	7	381.1	1.4	9.4	14.2	7.1	14.2	13.5
<i>T. rossmani</i>	5	533.2	3.2	14.5	19.1	11.5	22.9	21.4
<i>T. rufipunctatus</i>	6	494.1	2.3	12.7	19.9	9.8	24.2	19.4
<i>T. sauritus</i>	15	362.2	0.9	7.7	12.8	6.1	14.4	12.6
<i>T. scalaris</i>	5	344.4	0.6	10.7	14.1	7.2	13.9	14.6
<i>T. scaliger</i>	5	475.4	2.4	12.4	17.1	10.5	20.0	18.9
<i>T. sirtalis</i>	15	428.0	1.2	9.6	15.8	7.6	18.1	15.6
<i>T. sumichrasti</i>	3	469.5	2.8	14.4	17.9	10.2	20.0	19.2

<i>T. validus</i>	4	403.3	2.0	12.0	16.6	9.3	17.8	16.8
<i>Virginia striatula</i>	3	225.0	0.3	5.4	7.9	4.4	6.9	6.8
<i>V. valeriae</i>	3	181.7	0.3	5.2	6.7	3.7	6.3	5.9
Psammophiinae								
<i>Psammophis angolensis</i>	3	285.0	1.0	5.2	5.9	4.1	9.0	7.8
<i>P. biseriatus</i>	3	464.0	1.0	8.0	16.1	7.9	18.1	12.6
<i>P. condanarus</i>	3	692.0	3.0	11.7	19.2	9.3	25.3	20.7
<i>P. culcuae</i>	3	838.0	4.0	17.6	23.6	10.5	34.0	22.5
<i>P. elegans</i>	3	805.0	1.0	10.8	19.6	7.8	24.2	20.2
<i>P. lineatus</i>	3	640.0	1.0	9.1	15.0	7.7	18.9	13.3
<i>P. notostictus</i>	3	666.0	2.0	12.9	18.7	9.3	23.1	19.1
<i>P. phillipsii</i>	3	1121.0	5.0	16.7	26.4	14.5	34.6	30.8
Pythoninae								
<i>Antaresia stimsoni</i>	3	253.0	1.0	7.5	7.1	4.8	14.1	9.5
<i>Liasis maculosus</i>	3	636.0	3.3	14.7	12.0	7.1	17.7	14.2
<i>Morelia viridis</i>	3	680.0	3.0	16.1	18.6	13.3	27.1	18.2
<i>Python molurus</i>	3	997.3	15.5	26.0	30.4	20.7	45.0	33.5
<i>P. regius</i>	3	932.0	10.0	23.4	27.44	14.7	36.0	28.2
<i>P. reticulatus</i>	3	1642.0	27.0	33.2	29.6	24.0	57.1	45.0
<i>P. sebae</i>	3	866.6	10.7	21.5	24.6	16.7	38.3	30.5
<i>P. timoriensis</i>	3	727.0	3.0	16.0	22.7	11.5	29.1	21.6
Tropidophiidae								
<i>Trachyboa boulengeri</i>	3	226.0	1.0	9.3	9.3	5.9	11.8	9.5
<i>Tropidophis canus</i>	3	268.0	1.0	7.3	7.3	5.7	12.9	8.4
<i>T. haetianus</i>	3	291.0	1.0	8.9	8.9	8.2	13.7	9.3
<i>T. melanurus</i>	3	555.0	3.0	16.6	16.6	9.4	18.7	14.5
<i>T. pardalis</i>	3	255.0	1.0	9.2	9.2	6.4	12.7	8.4
Viperidae								
<i>Agkistrodon bislineata</i>	3	804.9	33.45	39.7	29.2	23.0	44.3	39.4
<i>A. contortrix</i>	3	881.9	9.5	27.9	21.0	16.7	33.2	29.4
<i>A. piscivorus</i>	108	577.7	12.3	27.0	31.2	16.8	39.5	30.1
<i>Atropoides nummifer</i>	3	420.0	6.0	19.9	16.8	16.8	32.3	25.9
<i>Atheris cerataphorus</i>	3	303.8	1.0	13.5	9.3	6.6	14.6	12.5
<i>A. nitschei</i>	3	300.0	1.0	14.3	11.2	8.7	19.6	15.2
<i>A. squemiger</i>	3	495.0	5.0	21.7	15.2	14.9	25.1	22.3
<i>Bitis arietaas</i>	3	769.4	23.5	44.9	28.1	19.6	50.3	43.9
<i>B. caudalis</i>	3	238.0	2.0	14.1	11.0	11.4	20.3	16.8
<i>B. gabonica</i>	3	537.2	10.0	31.6	23.6	14.7	41.4	34.5
<i>B. nasicormis</i>	3	523.0	20.0	30.0	20.2	17.2	39.6	31.0
<i>B. bicolor</i>	3	910.0	8.0	29.9	18.9	15.9	37.8	31.8
<i>B. schlegelli</i>	3	375.0	4.0	24.3	12.8	9.6	27.2	22.0
<i>Bothriopsis bilinego</i>	3	656.0	4.0	17.8	15.5	11.3	29.2	24.2
<i>B. oligolepis</i>	3	790.0	9.0	24.9	17.8	16.2	35.7	29.5
<i>Bothrops alternatus</i>	3	675.0	11.0	23.9	20.9	16.2	39.4	32.4
<i>Bothrops asper</i>	3	1400.0	30.0	35.1	36.5	19.9	58.3	48.9
<i>B. atrox</i>	3	1240.0	22.0	37.7	30.4	20.0	50.7	42.5
<i>B. microphthalmus</i>	3	161.0	1.0	9.3	9.9	6.8	12.6	8.9
<i>Calloselasma rhodostoma</i>	3	458.5	5.3	19.5	21.5	14.2	28.6	23.4
<i>Causus lichtensteini</i>	3	382.5	1.4	11.7	14.2	8.6	17.0	14.7
<i>C. lichtensteini</i>	3	265.1	1.0	10.5	12.2	6.7	15.5	12.3
<i>C. rhombeatus</i>	3	414.0	2.5	13.3	15.7	11.0	21.8	15.6
<i>Cerastes cerastes</i>	3	632.0	6.0	27.0	21.8	13.7	31.6	25.7
<i>Cerrophidion godmanni</i>	3	260.4	1.7	12.7	11.5	8.1	18.6	16.0
<i>Crotalus adamanteus</i>	3	1262.0	40.0	44.0	27.6	24.7	55.4	45.0
<i>C. aquilus</i>	3	464.3	3.0	19.2	14.8	10.7	25.6	19.1

<i>C. atrox</i>	3	596.5	5.9	23.6	17.8	14.5	29.8	23.6
<i>C. basiliscus</i>	3	1317.0	30.0	37.4	29.4	26.7	52.3	39.6
<i>C. catalinensis</i>	3	1020.0	11.0	26.5	20.8	16.2	37.1	28.4
<i>C. cerastes</i>	3	574.0	5.0	23.1	17.4	15.2	27.7	22.3
<i>C. durissus</i>	3	978.0	18.0	30.4	23.3	22.4	43.2	34.0
<i>C. enyo</i>	3	749.0	4.0	15.0	16.9	11.2	28.8	21.4
<i>C. horridus</i>	3	1404.0	45.0	43.4	28.7	32.9	56.1	44.9
<i>C. intermedius</i>	3	533.0	3.0	18.4	15.5	13.5	24.2	18.6
<i>C. lepidus</i>	3	555.0	2.0	18.2	13.4	9.4	23.5	17.5
<i>C. mitchelli</i>	3	1122.0	17.0	33.6	23.5	23.5	43.3	32.7
<i>C. molossus</i>	3	1100.0	28.0	38.5	31.4	23.7	51.1	38.7
<i>C. polystictus</i>	3	804.0	9.0	27.1	23.0	14.6	40.0	32.7
<i>C. pricei</i>	3	553.0	2.0	17.4	13.5	10.7	24.4	19.4
<i>C. ruber</i>	3	903.0	11.0	26.7	22.7	18.2	38.4	28.2
<i>C. scutulatus</i>	3	707.0	10.0	28.5	22.8	16.6	25.4	28.4
<i>C. tigris</i>	3	784.0	5.0	19.6	14.0	14.2	27.9	20.8
<i>C. tortugensis</i>	3	1371.0	39.0	40.9	27.7	24.7	55.1	42.7
<i>C. triseriatus</i>	3	507.0	4.0	19.5	18.0	11.5	23.9	21.5
<i>C. unicolor</i>	3	995.0	11.0	31.1	23.7	18.1	39.7	29.0
<i>C. vegrandis</i>	3	251.0	1.0	9.9	7.7	8.1	18.1	13.5
<i>C. viridis</i>	3	821.0	11.0	29.3	16.5	18.6	32.8	29.9
<i>C. willardi</i>	3	520.0	6.0	17.7	14.6	16.3	27.2	22.2
<i>Dabovia casselli</i>	3	1086.0	20.0	36.6	27.0	18.4	45.9	40.0
<i>D. siamensis</i>	3	940.0	10.0	28.0	28.6	16.4	44.0	35.8
<i>Deinagkistrodon acutus</i>	3	840.0	20.0	31.6	32.8	18.1	51.7	40.3
<i>Echis coloratus</i>	3	666.0	5.0	18.3	21.5	11.2	30.1	24.1
<i>Gloydius blamhoffi</i>	3	365.0	1.0	17.2	15.8	6.0	26.0	18.1
<i>Hypnale hypnale</i>	3	340.0	2.0	13.2	13.5	10.3	21.8	15.4
<i>Lachesis mutata</i>	3	1920.0	90.0	55.9	44.9	36.6	61.4	59.0
<i>Porthidium dunnii</i>	3	253.0	2.0	12.3	8.1	7.1	14.7	10.5
<i>P. lansbergii</i>	3	428.0	3.0	15.6	17.4	11.0	26.2	20.6
<i>P. nastum</i>	3	292.0	3.0	16.5	14.6	10.2	22.5	13.1
<i>Sistrurus miliaris</i>	3	324.0	1.0	12.2	11.5	7.6	17.4	14.1
<i>S. ravus</i>	3	680.0	6.0	21.6	17.0	11.0	24.9	23.0
<i>Trimeresurus albolabris</i>	3	515.0	3.0	14.8	9.7	11.1	22.8	19.8
<i>T. graminens</i>	3	375.0	4.0	17.4	9.8	10.6	22.5	18.8
<i>T. paniceus</i>	3	664.0	7.0	21.6	21.3	13.6	33.8	24.2
<i>T. stejnegeri</i>	3	565.0	7.0	20.8	13.2	13.3	30.3	25.4
<i>Tropidolaemus wagleri</i>	3	610.0	20.0	33.3	26.8	22.8	46.5	38.0
<i>Vipera ammodytes</i>	3	407.0	3.0	15.5	15.4	11.2	24.2	18.3
<i>V. aspis</i>	3	460.0	3.0	16.5	15.0	9.8	24.0	19.9
<i>V. berus</i>	3	375.0	1.0	12.3	10.8	7.9	16.9	14.0

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