Combined SPSS Output

```
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS CI BCOV R ANOVA COLLIN TOL CHANGE
ZPP
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT Mean
  /METHOD=ENTER Log_L Log_RC Log_ML Log_Vol
  /SCATTERPLOT=(*ZRESID ,*ZPRED )
  /RESIDUALS DURBIN HIST(ZRESID) NORM(ZRESID) .
```

Regression:

	Mean	Std. Deviation	N
Mean	1,686.8750	1,130.33836	24
Log_L	-0.698795258208	0.2568603021871	24
Log_RC	-0.732581497500	0.1819344546925	24
Log_ML	-0.884626787500	0.1755249354620	24
Log_Vol	-0.537384410208	0.5856370959394	24

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	Log_Vol, Log_ML, Log_L, Log_RC(a)	.	Enter

a. All requested variables entered.
b. Dependent Variable: Mean

Model Summary(b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.801(a)	0.642	0.567	744.03761

a. Predictors: (Constant), Log_Vol, Log_ML, Log_L, Log_RC
b. Dependent Variable: Mean

Change Statistics					Durbin-Watson
Sig. F Change	R Square Change	F Change	df1	df2	
0.642	8.521	4	19	0.000	2.394

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	18,868,043.347	4	4,717,010.837	8.521	.000(a)
	Residual	10,518,247.278	19	553,591.962		
	Total	29,386,290.625	23			

a. Predictors: (Constant), Log_Vol, Log_ML, Log_L, Log_RC
b. Dependent Variable: Mean

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3,501.347	946.660		3.699	0.002
	Log_L	3,834.272	663.796	0.871	5.776	0.000
	Log_RC	-3,683.112	3,015.834	-0.593	-1.221	0.237
	Log_ML	2,260.737	3,071.421	0.351	0.736	0.471
	Log_Vol	-310.072	287.532	-0.161	-1.078	0.294

a. Dependent Variable: Mean

95% Confidence Interval for B		Correlations			Collinearity Statistics	
Zero-order	Partial	Part	Tolerance	VIF	B	Std. Error
1,519.965	5,482.730					
2,444.931	5,223.614	0.752	0.798	0.793	0.828	1.208
-9,995.326	2,629.102	-0.013	-0.270	-0.168	0.080	12.508
-4,167.822	8,689.296	-0.007	0.167	0.101	0.083	12.075
-911.884	291.740	0.116	-0.240	-0.148	0.849	1.178

Coefficient Correlations(a)

Model			Log_Vol	Log_ML	Log_L	Log_RC
1	Correlations	Log_Vol	1.000	-0.249	-0.323	0.282
		Log_ML	-0.249	1.000	0.137	-0.955
		Log_L	-0.323	0.137	1.000	-0.219
		Log_RC	0.282	-0.955	-0.219	1.000
	Covariances	Log_Vol	82,674.861	-219,503.547	-61,665.988	244,349.197
		Log_ML	-219,503.547	9,433,629.170	279,935.841	-8,844,702.475
		Log_L	-61,665.988	279,935.841	440,625.368	-438,761.674
		Log_RC	244,349.197	-8,844,702.475	-438,761.674	9,095,257.509

a. Dependent Variable: Mean

Collinearity Diagnostics(a)

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions
				Log_RC
1	1	4.423	1.000	0.00
	2	0.468	3.075	0.00
	3	0.078	7.516	0.01
	4	0.030	12.197	0.60
	5	0.002	49.725	0.39

a. Dependent Variable: Mean

Log_ML	Log_Vol	(Constant)	Log_L
0.00	0.00	0.00	0.01
0.00	0.00	0.00	0.82
0.94	0.00	0.00	0.08
0.02	0.04	0.01	0.02
0.03	0.96	0.99	0.07

Residuals Statistics(a)

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	432.0923	3,741.5168	1,686.8750	905.73159	24
Residual	-964.99634	1,258.48303	0.00000	676.25077	24
Std. Predicted Value	-1.385	2.268	0.000	1.000	24
Std. Residual	-1.297	1.691	0.000	0.909	24

a. Dependent Variable: Mean

```
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS CI BCOV R ANOVA COLLIN TOL CHANGE
ZPP
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT Range
  /METHOD=ENTER Log_L Log_RC Log_ML Log_Vol
  /SCATTERPLOT=(*ZRESID ,*ZPRED )
  /RESIDUALS DURBIN HIST(ZRESID) NORM(ZRESID) .
```

Regression

Notes

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	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /DESCRIPTIVES MEAN STDDEV CORR SIG N /MISSING LISTWISE /STATISTICS COEFF OUTS CI BCOV R ANOVA COLLIN TOL CHANGE ZPP /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT Range /METHOD=ENTER Log_L Log_RC Log_ML Log_Vol /SCATTERPLOT=(*ZRESID ,*ZPRED) /RESIDUALS DURBIN HIST(ZRESID) NORM(ZRESID) .
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Descriptive Statistics

	Mean	Std. Deviation	N
Range	2,709.5833	2,119.77743	24
Log_L	-0.698795258208	0.2568603021871	24
Log_RC	-0.732581497500	0.1819344546925	24
Log_ML	-0.884626787500	0.1755249354620	24
Log_Vol	-0.537384410208	0.5856370959394	24

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	Log_Vol, Log_ML, Log_L, Log_RC(a)	.	Enter

a. All requested variables entered.

b. Dependent Variable: Range

Model Summary(b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.794(a)	0.631	0.553	1,416.70542

a. Predictors: (Constant), Log_Vol, Log_ML, Log_L, Log_RC
b. Dependent Variable: Range

Change Statistics					Durbin-Watson
Sig. F Change	R Square Change	F Change	df1	df2	
0.631	8.123	4	19	0.001	2.274

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	65,215,464.998	4	16,303,866.249	8.123	.001(a)
	Residual	38,134,030.836	19	2,007,054.255		
	Total	103,349,495.833	23			

a. Predictors: (Constant), Log_Vol, Log_ML, Log_L, Log_RC
b. Dependent Variable: Range

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5,813.750	1,802.515		3.225	0.004
	Log_L	7,001.204	1,263.920	0.848	5.539	0.000
	Log_RC	-7,222.573	5,742.383	-0.620	-1.258	0.224
	Log_ML	4,158.301	5,848.225	0.344	0.711	0.486
	Log_Vol	-326.884	547.484	-0.090	-0.597	0.558

a. Dependent Variable: Range

95% Confidence Interval for B		Correlations			Collinearity Statistics	
Zero-order	Partial	Part	Tolerance	VIF	B	Std. Error
2,041.044	9,586.456					
4,355.790	9,646.618	0.740	0.786	0.772	0.828	1.208
-19,241.519	4,796.373	-0.057	-0.277	-0.175	0.080	12.508
-8,082.175	16,398.776	-0.045	0.161	0.099	0.083	12.075
-1,472.781	819.013	0.182	-0.136	-0.083	0.849	1.178

Coefficient Correlations(a)

Model			Log_Vol	Log_ML	Log_L	Log_RC
1	Correlations	Log_Vol	1.000	-0.249	-0.323	0.282
		Log_ML	-0.249	1.000	0.137	-0.955
		Log_L	-0.323	0.137	1.000	-0.219
		Log_RC	0.282	-0.955	-0.219	1.000
	Covariances	Log_Vol	299,738.695	-795,812.726	-223,570.773	885,890.927
		Log_ML	-795,812.726	34,201,734.961	1,014,910.727	-32,066,574.209
		Log_L	-223,570.773	1,014,910.727	1,597,492.522	-1,590,735.678
		Log_RC	885,890.927	-32,066,574.209	-1,590,735.678	32,974,964.473

a. Dependent Variable: Range

Collinearity Diagnostics(a)

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				Log_RC	Log_ML	Log_Vol
1	1	4.423	1.000	0.00	0.00	0.00
	2	0.468	3.075	0.00	0.00	0.00
	3	0.078	7.516	0.01	0.94	0.00
	4	0.030	12.197	0.60	0.02	0.04
	5	0.002	49.725	0.39	0.03	0.96

a. Dependent Variable: Range

(Constant)	Log_L
0.00	0.01
0.00	0.82
0.00	0.08
0.01	0.02
0.99	0.07

Residuals Statistics(a)

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	720.9651	6,666.7793	2,709.5833	1,683.88093	24
Residual	-1,990.97974	2,583.13647	0.00000	1,287.63401	24
Std. Predicted Value	-1.181	2.350	0.000	1.000	24
Std. Residual	-1.405	1.823	0.000	0.909	24

a. Dependent Variable: Range

```
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT LogRC
  /METHOD=ENTER Singlephrase Multiphrase Complex_multiphrase Pairs
  Less_than_20 More_than_20 Closed_terrestrial Aquatic Fossorial
  /RESIDUALS DURBIN
  /SAVE PRED ZPRED MAHAL COOK LEVER RESID SRESID SDRESID DFBETA SDBETA .

REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT Loglength
  /METHOD=ENTER Singlephrase Multiphrase Complex_multiphrase Pairs
  Less_than_20 More_than_20 Closed_terrestrial Aquatic Fossorial
  /RESIDUALS DURBIN
  /SAVE PRED ZPRED MAHAL COOK LEVER RESID SRESID SDRESID DFBETA SDBETA .
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Regression

Notes

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	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /DESCRIPTIVES MEAN STDDEV CORR SIG N /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT Loglength /METHOD=ENTER Singlephrase Multiphrase Complex_multiphrase Pairs Less_than_20 More_than_20 Closed_terrestrial Aquatic Fossorial /RESIDUALS DURBIN /SAVE PRED ZPRED MAHAL COOK LEVER RESID SRESID SDRESID DFBETA SDBETA .

Notes

Resources	Elapsed Time	0:00:00.02
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	Additional Memory Required for Residual Plots	0 bytes
	Processor Time	0:00:00.02
Variables Created or Modified	PRE_20	Unstandardized Predicted Value
	RES_20	Unstandardized Residual
	ZPR_20	Standardized Predicted Value
	SRE_20	Studentized Residual
	SDR_9	Studentized Deleted Residual
	MAH_9	Mahalanobis Distance
	COO_9	Cook's Distance
	LEV_9	Centered Leverage Value
	DFB0_20	DFBETA for (Constant)
	DFB1_20	DFBETA for Singlephrase
	DFB2_20	DFBETA for Multiphrase
	DFB3_20	DFBETA for Complex_multiphrase
	DFB4_20	DFBETA for Pairs
	DFB5_20	DFBETA for Less_than_20
	DFB6_20	DFBETA for More_than_20
	DFB7_20	DFBETA for Closed_terrestrial
	DFB8_20	DFBETA for Aquatic
	DFB9_20	DFBETA for Fossorial
	SDB0_9	Standardized DFBETA for (Constant)
	SDB1_9	Standardized DFBETA for Singlephrase
	SDB2_9	Standardized DFBETA for Multiphrase
	SDB3_9	Standardized DFBETA for Complex_multiphrase
	SDB4_9	Standardized DFBETA for Pairs
	SDB5_9	Standardized DFBETA for Less_ than_20
	SDB6_9	Standardized DFBETA for More_ than_20
	SDB7_9	Standardized DFBETA for Closed_ terrestrial
	SDB8_9	Standardized DFBETA for Aquatic
	SDB9_9	Standardized DFBETA for

[DataSet1] E:\Stig.sav

Descriptive Statistics

	Mean	Std. Deviation	N
Loglength	-.6965	.24262	59
Singlephrase	.3051	.46440	59
Multiphrase	.2203	.41803	59
Complex_multiphrase	.1017	.30484	59
Pairs	.0678	.25355	59
Less_than_20	.1695	.37841	59
More_than_20	.1864	.39280	59
Closed_terrestrial	.2542	.43917	59
Aquatic	.2203	.41803	59
Fossorial	.1017	.30484	59

Correlations

		Loglength	Singlephrase	Multiphrase	Complex_ multiphrase
Pearson Correlation	Loglength	1.000	-.193	.332	.437
	Singlephrase	-.193	1.000	-.352	-.223
	Multiphrase	.332	-.352	1.000	-.179
	Complex_multiphrase	.437	-.223	-.179	1.000
	Pairs	.271	-.032	.182	-.091
	Less_than_20	-.024	.486	-.022	-.152
	More_than_20	.470	-.223	.061	.559
	Closed_terrestrial	.087	-.049	-.123	.319
	Aquatic	-.205	.447	-.085	-.179
	Fossorial	-.109	-.101	-.179	-.113
Sig. (1-tailed)	Loglength	.	.071	.005	.000
	Singlephrase	.071	.	.003	.045
	Multiphrase	.005	.003	.	.088
	Complex_multiphrase	.000	.045	.088	.
	Pairs	.019	.404	.084	.247
	Less_than_20	.430	.000	.434	.125
	More_than_20	.000	.045	.324	.000
	Closed_terrestrial	.257	.357	.178	.007
	Aquatic	.060	.000	.260	.088
	Fossorial	.206	.223	.088	.197
N	Loglength	59	59	59	59
	Singlephrase	59	59	59	59
	Multiphrase	59	59	59	59
	Complex_multiphrase	59	59	59	59
	Pairs	59	59	59	59
	Less_than_20	59	59	59	59
	More_than_20	59	59	59	59
	Closed_terrestrial	59	59	59	59
	Aquatic	59	59	59	59
	Fossorial	59	59	59	59

Correlations

		Pairs	Less_than_20	More_than_20	Closed_ terrestrial
Pearson Correlation	Loglength	.271	-.024	.470	.087
	Singlephrase	-.032	.486	-.223	-.049
	Multiphrase	.182	-.022	.061	-.123
	Complex_multiphrase	-.091	-.152	.559	.319
	Pairs	1.000	-.122	-.129	-.003
	Less_than_20	-.122	1.000	-.216	-.264
	More_than_20	-.129	-.216	1.000	.020
	Closed_terrestrial	-.003	-.264	.020	1.000
	Aquatic	-.143	.632	.061	-.310
	Fossorial	.132	-.152	-.161	-.196
Sig. (1-tailed)	Loglength	.019	.430	.000	.257
	Singlephrase	.404	.000	.045	.357
	Multiphrase	.084	.434	.324	.178
	Complex_multiphrase	.247	.125	.000	.007
	Pairs	.	.179	.165	.492
	Less_than_20	.179	.	.050	.022
	More_than_20	.165	.050	.	.439
	Closed_terrestrial	.492	.022	.439	.
	Aquatic	.139	.000	.324	.008
	Fossorial	.159	.125	.111	.068
N	Loglength	59	59	59	59
	Singlephrase	59	59	59	59
	Multiphrase	59	59	59	59
	Complex_multiphrase	59	59	59	59
	Pairs	59	59	59	59
	Less_than_20	59	59	59	59
	More_than_20	59	59	59	59
	Closed_terrestrial	59	59	59	59
	Aquatic	59	59	59	59
	Fossorial	59	59	59	59

Correlations

		Aquatic	Fossorial
Pearson Correlation	Loglength	-.205	-.109
	Singlephrase	.447	-.101
	Multiphrase	-.085	-.179
	Complex_multiphrase	-.179	-.113
	Pairs	-.143	.132
	Less_than_20	.632	-.152
	More_than_20	.061	-.161
	Closed_terrestrial	-.310	-.196
	Aquatic	1.000	-.179
	Fossorial	-.179	1.000
Sig. (1-tailed)	Loglength	.060	.206
	Singlephrase	.000	.223
	Multiphrase	.260	.088
	Complex_multiphrase	.088	.197
	Pairs	.139	.159
	Less_than_20	.000	.125
	More_than_20	.324	.111
	Closed_terrestrial	.008	.068
	Aquatic	.	.088
	Fossorial	.088	.
N	Loglength	59	59
	Singlephrase	59	59
	Multiphrase	59	59
	Complex_multiphrase	59	59
	Pairs	59	59
	Less_than_20	59	59
	More_than_20	59	59
	Closed_terrestrial	59	59
	Aquatic	59	59
	Fossorial	59	59

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Fossorial, Singlephrase, Pairs, Closed_terrestrial, More_than_20, Multiphrase, Aquatic, Complex_multiphrase, Less_than_20[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Loglength

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.752[a]	.565	.485	.17403

Model Summary[b]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.565	7.081	9	49	.000	1.914

a. Predictors: (Constant), Fossorial, Singlephrase, Pairs, Closed_terrestrial, More_than_20, Multiphrase, Aquatic, Complex_multiphrase, Less_than_20

b. Dependent Variable: Loglength

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.930	9	.214	7.081	.000[a]
	Residual	1.484	49	.030		
	Total	3.414	58			

a. Predictors: (Constant), Fossorial, Singlephrase, Pairs, Closed_terrestrial, More_than_20, Multiphrase, Aquatic, Complex_multiphrase, Less_than_20

b. Dependent Variable: Loglength

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.836	.048		-17.427	.000
	Singlephrase	.040	.066	.077	.612	.544
	Multiphrase	.177	.068	.305	2.612	.012
	Complex_multiphrase	.206	.108	.258	1.902	.063
	Pairs	.278	.095	.291	2.918	.005
	Less_than_20	.234	.091	.366	2.577	.013
	More_than_20	.287	.082	.465	3.500	.001
	Closed_terrestrial	.010	.062	.018	.166	.869
	Aquatic	-.219	.081	-.377	-2.710	.009
	Fossorial	.009	.085	.011	.104	.917

Coefficients[a]

Model		Correlations			Collinearity Statistics	
		Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)					
	Singlephrase	-.193	.087	.058	.553	1.809
	Multiphrase	.332	.350	.246	.652	1.534
	Complex_multiphrase	.437	.262	.179	.481	2.078
	Pairs	.271	.385	.275	.894	1.119
	Less_than_20	-.024	.345	.243	.440	2.271
	More_than_20	.470	.447	.330	.502	1.991
	Closed_terrestrial	.087	.024	.016	.711	1.406
	Aquatic	-.205	-.361	-.255	.458	2.185
	Fossorial	-.109	.015	.010	.786	1.272

a. Dependent Variable: Loglength

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index
1	1	3.109	1.000
	2	1.872	1.289
	3	1.364	1.510
	4	1.051	1.720
	5	.895	1.864
	6	.668	2.157
	7	.437	2.667
	8	.292	3.261
	9	.168	4.301
	10	.142	4.679

Collinearity Diagnostics[a]

Model	Dimension	Variance Proportions				
		(Constant)	Singlephrase	Multiphrase	Complex_ multiphrase	Pairs
1	1	.02	.02	.01	.01	.01
	2	.00	.02	.00	.06	.00
	3	.00	.00	.04	.03	.24
	4	.00	.03	.23	.01	.00
	5	.00	.02	.00	.00	.03
	6	.02	.01	.10	.04	.66
	7	.00	.11	.01	.26	.00
	8	.01	.45	.05	.04	.03
	9	.21	.00	.00	.35	.02
	10	.73	.34	.54	.19	.01

Collinearity Diagnostics[a]

Model	Dimension	Variance Proportions				
		Less_than_20	More_than_20	Closed_ terrestrial	Aquatic	Fossorial
1	1	.02	.01	.01	.02	.00
	2	.04	.04	.04	.02	.00
	3	.01	.02	.00	.01	.12
	4	.00	.01	.03	.00	.20
	5	.00	.08	.23	.01	.24
	6	.00	.02	.07	.01	.07
	7	.32	.16	.00	.02	.02
	8	.00	.00	.29	.49	.02
	9	.50	.63	.25	.23	.08
	10	.12	.03	.08	.17	.25

a. Dependent Variable: Loglength

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-1.0551	-.3331	-.6965	.18243	59
Std. Predicted Value	-1.966	1.992	.000	1.000	59
Standard Error of Predicted Value	.048	.108	.070	.017	59
Adjusted Predicted Value	-1.0596	-.2485	-.6986	.18630	59
Residual	-.43553	.41910	.00000	.15996	59
Std. Residual	-2.503	2.408	.000	.919	59
Stud. Residual	-2.743	2.593	.006	1.017	59
Deleted Residual	-.52313	.48591	.00213	.19675	59
Stud. Deleted Residual	-2.950	2.763	.006	1.050	59
Mahal. Distance	3.425	21.426	8.847	4.734	59
Cook's Distance	.000	.216	.024	.046	59
Centered Leverage Value	.059	.369	.153	.082	59

a. Dependent Variable: Loglength

```
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT LogRC
  /METHOD=ENTER Singlephrase Multiphrase Complex_multiphrase Pairs
  Less_than_20 More_than_20 Closed_terrestrial Aquatic Fossorial
  /RESIDUALS DURBIN
  /SAVE PRED ZPRED MAHAL COOK LEVER RESID SRESID SDRESID DFBETA SDBETA .
```

Regression

Notes

Output Created		28-AUG-2008 13:35:28
Comments		
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Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /DESCRIPTIVES MEAN STDDEV CORR SIG N /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT LogRC /METHOD=ENTER Singlephrase Multiphrase Complex_multiphrase Pairs Less_than_20 More_than_20 Closed_terrestrial Aquatic Fossorial /RESIDUALS DURBIN /SAVE PRED ZPRED MAHAL COOK LEVER RESID SRESID SDRESID DFBETA SDBETA .
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	Processor Time	0:00:00.08

Notes

Variables Created or Modified	PRE_19	Unstandardized Predicted Value
	RES_19	Unstandardized Residual
	ZPR_19	Standardized Predicted Value
	SRE_19	Studentized Residual
	SDR_8	Studentized Deleted Residual
	MAH_8	Mahalanobis Distance
	COO_8	Cook's Distance
	LEV_8	Centered Leverage Value
	DFB0_19	DFBETA for (Constant)
	DFB1_19	DFBETA for Singlephrase
	DFB2_19	DFBETA for Multiphrase
	DFB3_19	DFBETA for Complex_multiphrase
	DFB4_19	DFBETA for Pairs
	DFB5_19	DFBETA for Less_than_20
	DFB6_19	DFBETA for More_than_20
	DFB7_19	DFBETA for Closed_terrestrial
	DFB8_19	DFBETA for Aquatic
	DFB9_19	DFBETA for Fossorial
	SDB0_8	Standardized DFBETA for (Constant)
	SDB1_8	Standardized DFBETA for Singlephrase
	SDB2_8	Standardized DFBETA for Multiphrase
	SDB3_8	Standardized DFBETA for Complex_multiphrase
	SDB4_8	Standardized DFBETA for Pairs
	SDB5_8	Standardized DFBETA for Less_ than_20
	SDB6_8	Standardized DFBETA for More_ than_20
	SDB7_8	Standardized DFBETA for Closed_ terrestrial
	SDB8_8	Standardized DFBETA for Aquatic
	SDB9_8	Standardized DFBETA for

[DataSet1] E:\Stig.sav

Descriptive Statistics

	Mean	Std. Deviation	N
LogRC	-.7667	.19078	59
Singlephrase	.3051	.46440	59
Multiphrase	.2203	.41803	59
Complex_multiphrase	.1017	.30484	59
Pairs	.0678	.25355	59
Less_than_20	.1695	.37841	59
More_than_20	.1864	.39280	59
Closed_terrestrial	.2542	.43917	59
Aquatic	.2203	.41803	59
Fossorial	.1017	.30484	59

Correlations

		LogRC	Singlephrase	Multiphrase	Complex_ multiphrase
Pearson Correlation	LogRC	1.000	-.272	.140	-.087
	Singlephrase	-.272	1.000	-.352	-.223
	Multiphrase	.140	-.352	1.000	-.179
	Complex_multiphrase	-.087	-.223	-.179	1.000
	Pairs	.127	-.032	.182	-.091
	Less_than_20	-.356	.486	-.022	-.152
	More_than_20	-.170	-.223	.061	.559
	Closed_terrestrial	.056	-.049	-.123	.319
	Aquatic	-.495	.447	-.085	-.179
	Fossorial	.315	-.101	-.179	-.113
Sig. (1-tailed)	LogRC	.	.019	.145	.255
	Singlephrase	.019	.	.003	.045
	Multiphrase	.145	.003	.	.088
	Complex_multiphrase	.255	.045	.088	.
	Pairs	.170	.404	.084	.247
	Less_than_20	.003	.000	.434	.125
	More_than_20	.099	.045	.324	.000
	Closed_terrestrial	.336	.357	.178	.007
	Aquatic	.000	.000	.260	.088
	Fossorial	.008	.223	.088	.197
N	LogRC	59	59	59	59
	Singlephrase	59	59	59	59
	Multiphrase	59	59	59	59
	Complex_multiphrase	59	59	59	59
	Pairs	59	59	59	59
	Less_than_20	59	59	59	59
	More_than_20	59	59	59	59
	Closed_terrestrial	59	59	59	59
	Aquatic	59	59	59	59
	Fossorial	59	59	59	59

Correlations

		Pairs	Less_than_20	More_than_20	Closed_ terrestrial
Pearson Correlation	LogRC	.127	-.356	-.170	.056
	Singlephrase	-.032	.486	-.223	-.049
	Multiphrase	.182	-.022	.061	-.123
	Complex_multiphrase	-.091	-.152	.559	.319
	Pairs	1.000	-.122	-.129	-.003
	Less_than_20	-.122	1.000	-.216	-.264
	More_than_20	-.129	-.216	1.000	.020
	Closed_terrestrial	-.003	-.264	.020	1.000
	Aquatic	-.143	.632	.061	-.310
	Fossorial	.132	-.152	-.161	-.196
Sig. (1-tailed)	LogRC	.170	.003	.099	.336
	Singlephrase	.404	.000	.045	.357
	Multiphrase	.084	.434	.324	.178
	Complex_multiphrase	.247	.125	.000	.007
	Pairs	.	.179	.165	.492
	Less_than_20	.179	.	.050	.022
	More_than_20	.165	.050	.	.439
	Closed_terrestrial	.492	.022	.439	.
	Aquatic	.139	.000	.324	.008
	Fossorial	.159	.125	.111	.068
N	LogRC	59	59	59	59
	Singlephrase	59	59	59	59
	Multiphrase	59	59	59	59
	Complex_multiphrase	59	59	59	59
	Pairs	59	59	59	59
	Less_than_20	59	59	59	59
	More_than_20	59	59	59	59
	Closed_terrestrial	59	59	59	59
	Aquatic	59	59	59	59
	Fossorial	59	59	59	59

Correlations

		Aquatic	Fossorial
Pearson Correlation	LogRC	-.495	.315
	Singlephrase	.447	-.101
	Multiphrase	-.085	-.179
	Complex_multiphrase	-.179	-.113
	Pairs	-.143	.132
	Less_than_20	.632	-.152
	More_than_20	.061	-.161
	Closed_terrestrial	-.310	-.196
	Aquatic	1.000	-.179
	Fossorial	-.179	1.000
Sig. (1-tailed)	LogRC	.000	.008
	Singlephrase	.000	.223
	Multiphrase	.260	.088
	Complex_multiphrase	.088	.197
	Pairs	.139	.159
	Less_than_20	.000	.125
	More_than_20	.324	.111
	Closed_terrestrial	.008	.068
	Aquatic	.	.088
	Fossorial	.088	.
N	LogRC	59	59
	Singlephrase	59	59
	Multiphrase	59	59
	Complex_multiphrase	59	59
	Pairs	59	59
	Less_than_20	59	59
	More_than_20	59	59
	Closed_terrestrial	59	59
	Aquatic	59	59
	Fossorial	59	59

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Fossorial, Singlephrase, Pairs, Closed_terrestrial, More_than_20, Multiphrase, Aquatic, Complex_multiphrase, Less_than_20[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: LogRC

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.585[a]	.343	.222	.16830

Model Summary[b]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.343	2.836	9	49	.009	1.711

a. Predictors: (Constant), Fossorial, Singlephrase, Pairs, Closed_terrestrial, More_than_20, Multiphrase, Aquatic, Complex_multiphrase, Less_than_20

b. Dependent Variable: LogRC

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.723	9	.080	2.836	.009[a]
	Residual	1.388	49	.028		
	Total	2.111	58			

a. Predictors: (Constant), Fossorial, Singlephrase, Pairs, Closed_terrestrial, More_than_20, Multiphrase, Aquatic, Complex_multiphrase, Less_than_20

b. Dependent Variable: LogRC

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.730	.046		-15.741	.000
	Singlephrase	-.008	.064	-.019	-.124	.902
	Multiphrase	.063	.065	.139	.969	.337
	Complex_multiphrase	-.037	.105	-.059	-.350	.728
	Pairs	-.013	.092	-.017	-.137	.892
	Less_than_20	-.057	.088	-.113	-.646	.522
	More_than_20	-.057	.079	-.117	-.714	.478
	Closed_terrestrial	-.003	.060	-.006	-.043	.966
	Aquatic	-.169	.078	-.370	-2.158	.036
	Fossorial	.144	.082	.230	1.761	.085

Coefficients[a]

Model		Correlations			Collinearity Statistics	
		Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)					
	Singlephrase	-.272	-.018	-.014	.553	1.809
	Multiphrase	.140	.137	.112	.652	1.534
	Complex_multiphrase	-.087	-.050	-.041	.481	2.078
	Pairs	.127	-.020	-.016	.894	1.119
	Less_than_20	-.356	-.092	-.075	.440	2.271
	More_than_20	-.170	-.102	-.083	.502	1.991
	Closed_terrestrial	.056	-.006	-.005	.711	1.406
	Aquatic	-.495	-.295	-.250	.458	2.185
	Fossorial	.315	.244	.204	.786	1.272

a. Dependent Variable: LogRC

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index
1	1	3.109	1.000
	2	1.872	1.289
	3	1.364	1.510
	4	1.051	1.720
	5	.895	1.864
	6	.668	2.157
	7	.437	2.667
	8	.292	3.261
	9	.168	4.301
	10	.142	4.679

Collinearity Diagnostics[a]

Model	Dimension	Variance Proportions				
		(Constant)	Singlephrase	Multiphrase	Complex_ multiphrase	Pairs
1	1	.02	.02	.01	.01	.01
	2	.00	.02	.00	.06	.00
	3	.00	.00	.04	.03	.24
	4	.00	.03	.23	.01	.00
	5	.00	.02	.00	.00	.03
	6	.02	.01	.10	.04	.66
	7	.00	.11	.01	.26	.00
	8	.01	.45	.05	.04	.03
	9	.21	.00	.00	.35	.02
	10	.73	.34	.54	.19	.01

Collinearity Diagnostics[a]

Model	Dimension	Variance Proportions				
		Less_than_20	More_than_20	Closed_ terrestrial	Aquatic	Fossorial
1	1	.02	.01	.01	.02	.00
	2	.04	.04	.04	.02	.00
	3	.01	.02	.00	.01	.12
	4	.00	.01	.03	.00	.20
	5	.00	.08	.23	.01	.24
	6	.00	.02	.07	.01	.07
	7	.32	.16	.00	.02	.02
	8	.00	.00	.29	.49	.02
	9	.50	.63	.25	.23	.08
	10	.12	.03	.08	.17	.25

a. Dependent Variable: LogRC

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-.9638	-.5864	-.7667	.11165	59
Std. Predicted Value	-1.765	1.615	.000	1.000	59
Standard Error of Predicted Value	.046	.105	.067	.016	59
Adjusted Predicted Value	-.9945	-.5628	-.7653	.11584	59
Residual	-.29793	.34527	.00000	.15470	59
Std. Residual	-1.770	2.051	.000	.919	59
Stud. Residual	-1.901	2.178	-.004	.999	59
Deleted Residual	-.35062	.38902	-.00145	.18335	59
Stud. Deleted Residual	-1.955	2.268	-.006	1.011	59
Mahal. Distance	3.425	21.426	8.847	4.734	59
Cook's Distance	.000	.114	.019	.023	59
Centered Leverage Value	.059	.369	.153	.082	59

a. Dependent Variable: LogRC

```
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT LogVol
  /METHOD=ENTER Singlephrase Multiphrase Complex_multiphrase Pairs
  Less_than_20 More_than_20 Closed_terrestrial Aquatic Fossorial
  /RESIDUALS DURBIN
  /SAVE PRED ZPRED MAHAL COOK LEVER RESID SRESID SDRESID DFBETA SDBETA .

REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT LogML
  /METHOD=ENTER Singlephrase Multiphrase Complex_multiphrase Pairs
  Less_than_20 More_than_20 Closed_terrestrial Aquatic Fossorial
  /RESIDUALS DURBIN
  /SAVE PRED ZPRED MAHAL COOK LEVER RESID SRESID SDRESID DFBETA SDBETA .
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Regression

Notes

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Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /DESCRIPTIVES MEAN STDDEV CORR SIG N /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT LogML /METHOD=ENTER Singlephrase Multiphrase Complex_multiphrase Pairs Less_than_20 More_than_20 Closed_terrestrial Aquatic Fossorial /RESIDUALS DURBIN /SAVE PRED ZPRED MAHAL COOK LEVER RESID SRESID SDRESID DFBETA SDBETA .

Notes

Resources	Elapsed Time	0:00:00.03
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	Processor Time	0:00:00.03
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	RES_18	Unstandardized Residual
	ZPR_18	Standardized Predicted Value
	SRE_18	Studentized Residual
	SDR_7	Studentized Deleted Residual
	MAH_7	Mahalanobis Distance
	COO_7	Cook's Distance
	LEV_7	Centered Leverage Value
	DFB0_18	DFBETA for (Constant)
	DFB1_18	DFBETA for Singlephrase
	DFB2_18	DFBETA for Multiphrase
	DFB3_18	DFBETA for Complex_multiphrase
	DFB4_18	DFBETA for Pairs
	DFB5_18	DFBETA for Less_than_20
	DFB6_18	DFBETA for More_than_20
	DFB7_18	DFBETA for Closed_terrestrial
	DFB8_18	DFBETA for Aquatic
	DFB9_18	DFBETA for Fossorial
	SDB0_7	Standardized DFBETA for (Constant)
	SDB1_7	Standardized DFBETA for Singlephrase
	SDB2_7	Standardized DFBETA for Multiphrase
	SDB3_7	Standardized DFBETA for Complex_multiphrase
	SDB4_7	Standardized DFBETA for Pairs
	SDB5_7	Standardized DFBETA for Less_ than_20
	SDB6_7	Standardized DFBETA for More_ than_20
	SDB7_7	Standardized DFBETA for Closed_ terrestrial
	SDB8_7	Standardized DFBETA for Aquatic
	SDB9_7	Standardized DFBETA for

[DataSet1] E:\Stig.sav

Descriptive Statistics

	Mean	Std. Deviation	N
LogML	-.8844	.18857	59
Singlephrase	.3051	.46440	59
Multiphrase	.2203	.41803	59
Complex_multiphrase	.1017	.30484	59
Pairs	.0678	.25355	59
Less_than_20	.1695	.37841	59
More_than_20	.1864	.39280	59
Closed_terrestrial	.2542	.43917	59
Aquatic	.2203	.41803	59
Fossorial	.1017	.30484	59

Correlations

		LogML	Singlephrase	Multiphrase	Complex_ multiphrase
Pearson Correlation	LogML	1.000	-.166	.122	.032
	Singlephrase	-.166	1.000	-.352	-.223
	Multiphrase	.122	-.352	1.000	-.179
	Complex_multiphrase	.032	-.223	-.179	1.000
	Pairs	.076	-.032	.182	-.091
	Less_than_20	-.203	.486	-.022	-.152
	More_than_20	-.208	-.223	.061	.559
	Closed_terrestrial	.192	-.049	-.123	.319
	Aquatic	-.359	.447	-.085	-.179
	Fossorial	.235	-.101	-.179	-.113
Sig. (1-tailed)	LogML	.	.105	.179	.405
	Singlephrase	.105	.	.003	.045
	Multiphrase	.179	.003	.	.088
	Complex_multiphrase	.405	.045	.088	.
	Pairs	.285	.404	.084	.247
	Less_than_20	.062	.000	.434	.125
	More_than_20	.057	.045	.324	.000
	Closed_terrestrial	.072	.357	.178	.007
	Aquatic	.003	.000	.260	.088
	Fossorial	.037	.223	.088	.197
N	LogML	59	59	59	59
	Singlephrase	59	59	59	59
	Multiphrase	59	59	59	59
	Complex_multiphrase	59	59	59	59
	Pairs	59	59	59	59
	Less_than_20	59	59	59	59
	More_than_20	59	59	59	59
	Closed_terrestrial	59	59	59	59
	Aquatic	59	59	59	59
	Fossorial	59	59	59	59

Correlations

		Pairs	Less_than_20	More_than_20	Closed_ terrestrial
Pearson Correlation	LogML	.076	-.203	-.208	.192
	Singlephrase	-.032	.486	-.223	-.049
	Multiphrase	.182	-.022	.061	-.123
	Complex_multiphrase	-.091	-.152	.559	.319
	Pairs	1.000	-.122	-.129	-.003
	Less_than_20	-.122	1.000	-.216	-.264
	More_than_20	-.129	-.216	1.000	.020
	Closed_terrestrial	-.003	-.264	.020	1.000
	Aquatic	-.143	.632	.061	-.310
	Fossorial	.132	-.152	-.161	-.196
Sig. (1-tailed)	LogML	.285	.062	.057	.072
	Singlephrase	.404	.000	.045	.357
	Multiphrase	.084	.434	.324	.178
	Complex_multiphrase	.247	.125	.000	.007
	Pairs	.	.179	.165	.492
	Less_than_20	.179	.	.050	.022
	More_than_20	.165	.050	.	.439
	Closed_terrestrial	.492	.022	.439	.
	Aquatic	.139	.000	.324	.008
	Fossorial	.159	.125	.111	.068
N	LogML	59	59	59	59
	Singlephrase	59	59	59	59
	Multiphrase	59	59	59	59
	Complex_multiphrase	59	59	59	59
	Pairs	59	59	59	59
	Less_than_20	59	59	59	59
	More_than_20	59	59	59	59
	Closed_terrestrial	59	59	59	59
	Aquatic	59	59	59	59
	Fossorial	59	59	59	59

Correlations

		Aquatic	Fossorial
Pearson Correlation	LogML	-.359	.235
	Singlephrase	.447	-.101
	Multiphrase	-.085	-.179
	Complex_multiphrase	-.179	-.113
	Pairs	-.143	.132
	Less_than_20	.632	-.152
	More_than_20	.061	-.161
	Closed_terrestrial	-.310	-.196
	Aquatic	1.000	-.179
	Fossorial	-.179	1.000
Sig. (1-tailed)	LogML	.003	.037
	Singlephrase	.000	.223
	Multiphrase	.260	.088
	Complex_multiphrase	.088	.197
	Pairs	.139	.159
	Less_than_20	.000	.125
	More_than_20	.324	.111
	Closed_terrestrial	.008	.068
	Aquatic	.	.088
	Fossorial	.088	.
N	LogML	59	59
	Singlephrase	59	59
	Multiphrase	59	59
	Complex_multiphrase	59	59
	Pairs	59	59
	Less_than_20	59	59
	More_than_20	59	59
	Closed_terrestrial	59	59
	Aquatic	59	59
	Fossorial	59	59

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Fossorial, Singlephrase, Pairs, Closed_terrestrial, More_than_20, Multiphrase, Aquatic, Complex_multiphrase, Less_than_20[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: LogML

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.500[a]	.250	.112	.17771

Model Summary[b]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.250	1.812	9	49	.090	2.083

a. Predictors: (Constant), Fossorial, Singlephrase, Pairs, Closed_terrestrial, More_than_20, Multiphrase, Aquatic, Complex_multiphrase, Less_than_20

b. Dependent Variable: LogML

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.515	9	.057	1.812	.090[a]
	Residual	1.547	49	.032		
	Total	2.062	58			

a. Predictors: (Constant), Fossorial, Singlephrase, Pairs, Closed_terrestrial, More_than_20, Multiphrase, Aquatic, Complex_multiphrase, Less_than_20

b. Dependent Variable: LogML

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.904	.049		-18.453	.000
	Singlephrase	.016	.068	.039	.233	.817
	Multiphrase	.108	.069	.240	1.567	.124
	Complex_multiphrase	.110	.110	.177	.993	.326
	Pairs	-.040	.097	-.054	-.416	.679
	Less_than_20	-.033	.093	-.066	-.354	.725
	More_than_20	-.137	.084	-.286	-1.638	.108
	Closed_terrestrial	.063	.063	.148	1.008	.318
	Aquatic	-.082	.083	-.182	-.997	.324
	Fossorial	.154	.086	.249	1.788	.080

Coefficients[a]

Model		Correlations			Collinearity Statistics	
		Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)					
	Singlephrase	-.166	.033	.029	.553	1.809
	Multiphrase	.122	.218	.194	.652	1.534
	Complex_multiphrase	.032	.140	.123	.481	2.078
	Pairs	.076	-.059	-.051	.894	1.119
	Less_than_20	-.203	-.050	-.044	.440	2.271
	More_than_20	-.208	-.228	-.203	.502	1.991
	Closed_terrestrial	.192	.143	.125	.711	1.406
	Aquatic	-.359	-.141	-.123	.458	2.185
	Fossorial	.235	.247	.221	.786	1.272

a. Dependent Variable: LogML

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index
1	1	3.109	1.000
	2	1.872	1.289
	3	1.364	1.510
	4	1.051	1.720
	5	.895	1.864
	6	.668	2.157
	7	.437	2.667
	8	.292	3.261
	9	.168	4.301
	10	.142	4.679

Collinearity Diagnostics[a]

Model	Dimension	Variance Proportions				
		(Constant)	Singlephrase	Multiphrase	Complex_ multiphrase	Pairs
1	1	.02	.02	.01	.01	.01
	2	.00	.02	.00	.06	.00
	3	.00	.00	.04	.03	.24
	4	.00	.03	.23	.01	.00
	5	.00	.02	.00	.00	.03
	6	.02	.01	.10	.04	.66
	7	.00	.11	.01	.26	.00
	8	.01	.45	.05	.04	.03
	9	.21	.00	.00	.35	.02
	10	.73	.34	.54	.19	.01

Collinearity Diagnostics[a]

Model	Dimension	Variance Proportions				
		Less_than_20	More_than_20	Closed_ terrestrial	Aquatic	Fossorial
1	1	.02	.01	.01	.02	.00
	2	.04	.04	.04	.02	.00
	3	.01	.02	.00	.01	.12
	4	.00	.01	.03	.00	.20
	5	.00	.08	.23	.01	.24
	6	.00	.02	.07	.01	.07
	7	.32	.16	.00	.02	.02
	8	.00	.00	.29	.49	.02
	9	.50	.63	.25	.23	.08
	10	.12	.03	.08	.17	.25

a. Dependent Variable: LogML

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-1.1235	-.7310	-.8844	.09424	59
Std. Predicted Value	-2.538	1.628	.000	1.000	59
Standard Error of Predicted Value	.049	.110	.071	.017	59
Adjusted Predicted Value	-1.1554	-.6583	-.8835	.10128	59
Residual	-.36742	.56159	.00000	.16334	59
Std. Residual	-2.068	3.160	.000	.919	59
Stud. Residual	-2.266	3.352	-.002	1.002	59
Deleted Residual	-.44132	.63177	-.00089	.19476	59
Stud. Deleted Residual	-2.370	3.779	.005	1.044	59
Mahal. Distance	3.425	21.426	8.847	4.734	59
Cook's Distance	.000	.140	.019	.035	59
Centered Leverage Value	.059	.369	.153	.082	59

a. Dependent Variable: LogML

```
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT LogVol
  /METHOD=ENTER Singlephrase Multiphrase Complex_multiphrase Pairs
  Less_than_20 More_than_20 Closed_terrestrial Aquatic Fossorial
  /RESIDUALS DURBIN
  /SAVE PRED ZPRED MAHAL COOK LEVER RESID SRESID SDRESID DFBETA SDBETA .
```

Regression

Notes

Output Created		28-AUG-2008 13:34:09
Comments		
Input	Data	E:\Stig.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	59
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /DESCRIPTIVES MEAN STDDEV CORR SIG N /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT LogVol /METHOD=ENTER Singlephrase Multiphrase Complex_multiphrase Pairs Less_than_20 More_than_20 Closed_terrestrial Aquatic Fossorial /RESIDUALS DURBIN /SAVE PRED ZPRED MAHAL COOK LEVER RESID SRESID SDRESID DFBETA SDBETA .
Resources	Elapsed Time	0:00:00.05
	Memory Required	12260 bytes
	Additional Memory Required for Residual Plots	0 bytes
	Processor Time	0:00:00.04

Notes

Variables Created or Modified	PRE_17	Unstandardized Predicted Value
	RES_17	Unstandardized Residual
	ZPR_17	Standardized Predicted Value
	SRE_17	Studentized Residual
	SDR_6	Studentized Deleted Residual
	MAH_6	Mahalanobis Distance
	COO_6	Cook's Distance
	LEV_6	Centered Leverage Value
	DFB0_17	DFBETA for (Constant)
	DFB1_17	DFBETA for Singlephrase
	DFB2_17	DFBETA for Multiphrase
	DFB3_17	DFBETA for Complex_multiphrase
	DFB4_17	DFBETA for Pairs
	DFB5_17	DFBETA for Less_than_20
	DFB6_17	DFBETA for More_than_20
	DFB7_17	DFBETA for Closed_terrestrial
	DFB8_17	DFBETA for Aquatic
	DFB9_17	DFBETA for Fossorial
	SDB0_6	Standardized DFBETA for (Constant)
	SDB1_6	Standardized DFBETA for Singlephrase
	SDB2_6	Standardized DFBETA for Multiphrase
	SDB3_6	Standardized DFBETA for Complex_multiphrase
	SDB4_6	Standardized DFBETA for Pairs
	SDB5_6	Standardized DFBETA for Less_ than_20
	SDB6_6	Standardized DFBETA for More_ than_20
	SDB7_6	Standardized DFBETA for Closed_ terrestrial
	SDB8_6	Standardized DFBETA for Aquatic
	SDB9_6	Standardized DFBETA for

[DataSet1] E:\Stig.sav

Descriptive Statistics

	Mean	Std. Deviation	N
LogVol	-.6061	.62726	59
Singlephrase	.3051	.46440	59
Multiphrase	.2203	.41803	59
Complex_multiphrase	.1017	.30484	59
Pairs	.0678	.25355	59
Less_than_20	.1695	.37841	59
More_than_20	.1864	.39280	59
Closed_terrestrial	.2542	.43917	59
Aquatic	.2203	.41803	59
Fossorial	.1017	.30484	59

Correlations

		LogVol	Singlephrase	Multiphrase	Complex_ multiphrase
Pearson Correlation	LogVol	1.000	-.006	.209	.035
	Singlephrase	-.006	1.000	-.352	-.223
	Multiphrase	.209	-.352	1.000	-.179
	Complex_multiphrase	.035	-.223	-.179	1.000
	Pairs	.165	-.032	.182	-.091
	Less_than_20	-.123	.486	-.022	-.152
	More_than_20	.238	-.223	.061	.559
	Closed_terrestrial	-.084	-.049	-.123	.319
	Aquatic	-.001	.447	-.085	-.179
	Fossorial	-.089	-.101	-.179	-.113
Sig. (1-tailed)	LogVol	.	.483	.056	.396
	Singlephrase	.483	.	.003	.045
	Multiphrase	.056	.003	.	.088
	Complex_multiphrase	.396	.045	.088	.
	Pairs	.105	.404	.084	.247
	Less_than_20	.176	.000	.434	.125
	More_than_20	.035	.045	.324	.000
	Closed_terrestrial	.264	.357	.178	.007
	Aquatic	.497	.000	.260	.088
	Fossorial	.251	.223	.088	.197
N	LogVol	59	59	59	59
	Singlephrase	59	59	59	59
	Multiphrase	59	59	59	59
	Complex_multiphrase	59	59	59	59
	Pairs	59	59	59	59
	Less_than_20	59	59	59	59
	More_than_20	59	59	59	59
	Closed_terrestrial	59	59	59	59
	Aquatic	59	59	59	59
	Fossorial	59	59	59	59

Correlations

		Pairs	Less_than_20	More_than_20	Closed_ terrestrial
Pearson Correlation	LogVol	.165	-.123	.238	-.084
	Singlephrase	-.032	.486	-.223	-.049
	Multiphrase	.182	-.022	.061	-.123
	Complex_multiphrase	-.091	-.152	.559	.319
	Pairs	1.000	-.122	-.129	-.003
	Less_than_20	-.122	1.000	-.216	-.264
	More_than_20	-.129	-.216	1.000	.020
	Closed_terrestrial	-.003	-.264	.020	1.000
	Aquatic	-.143	.632	.061	-.310
	Fossorial	.132	-.152	-.161	-.196
Sig. (1-tailed)	LogVol	.105	.176	.035	.264
	Singlephrase	.404	.000	.045	.357
	Multiphrase	.084	.434	.324	.178
	Complex_multiphrase	.247	.125	.000	.007
	Pairs	.	.179	.165	.492
	Less_than_20	.179	.	.050	.022
	More_than_20	.165	.050	.	.439
	Closed_terrestrial	.492	.022	.439	.
	Aquatic	.139	.000	.324	.008
	Fossorial	.159	.125	.111	.068
N	LogVol	59	59	59	59
	Singlephrase	59	59	59	59
	Multiphrase	59	59	59	59
	Complex_multiphrase	59	59	59	59
	Pairs	59	59	59	59
	Less_than_20	59	59	59	59
	More_than_20	59	59	59	59
	Closed_terrestrial	59	59	59	59
	Aquatic	59	59	59	59
	Fossorial	59	59	59	59

Correlations

		Aquatic	Fossorial
Pearson Correlation	LogVol	-.001	-.089
	Singlephrase	.447	-.101
	Multiphrase	-.085	-.179
	Complex_multiphrase	-.179	-.113
	Pairs	-.143	.132
	Less_than_20	.632	-.152
	More_than_20	.061	-.161
	Closed_terrestrial	-.310	-.196
	Aquatic	1.000	-.179
	Fossorial	-.179	1.000
Sig. (1-tailed)	LogVol	.497	.251
	Singlephrase	.000	.223
	Multiphrase	.260	.088
	Complex_multiphrase	.088	.197
	Pairs	.139	.159
	Less_than_20	.000	.125
	More_than_20	.324	.111
	Closed_terrestrial	.008	.068
	Aquatic	.	.088
	Fossorial	.088	.
N	LogVol	59	59
	Singlephrase	59	59
	Multiphrase	59	59
	Complex_multiphrase	59	59
	Pairs	59	59
	Less_than_20	59	59
	More_than_20	59	59
	Closed_terrestrial	59	59
	Aquatic	59	59
	Fossorial	59	59

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Fossorial, Singlephrase, Pairs, Closed_terrestrial, More_than_20, Multiphrase, Aquatic, Complex_multiphrase, Less_than_20[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: LogVol

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.405[a]	.164	.010	.62407

Model Summary[b]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.164	1.066	9	49	.404	1.862

a. Predictors: (Constant), Fossorial, Singlephrase, Pairs, Closed_terrestrial, More_than_20, Multiphrase, Aquatic, Complex_multiphrase, Less_than_20

b. Dependent Variable: LogVol

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.737	9	.415	1.066	.404[a]
	Residual	19.084	49	.389		
	Total	22.821	58			

a. Predictors: (Constant), Fossorial, Singlephrase, Pairs, Closed_terrestrial, More_than_20, Multiphrase, Aquatic, Complex_multiphrase, Less_than_20

b. Dependent Variable: LogVol

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.752	.172		-4.369	.000
	Singlephrase	.276	.237	.204	1.164	.250
	Multiphrase	.315	.243	.210	1.298	.200
	Complex_multiphrase	-.006	.388	-.003	-.016	.987
	Pairs	.372	.342	.150	1.089	.281
	Less_than_20	-.316	.326	-.190	-.967	.338
	More_than_20	.388	.294	.243	1.317	.194
	Closed_terrestrial	-.160	.221	-.112	-.724	.473
	Aquatic	.010	.290	.006	.033	.973
	Fossorial	-.128	.303	-.062	-.421	.676

Coefficients[a]

Model		Correlations			Collinearity Statistics	
		Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)					
	Singlephrase	-.006	.164	.152	.553	1.809
	Multiphrase	.209	.182	.170	.652	1.534
	Complex_multiphrase	.035	-.002	-.002	.481	2.078
	Pairs	.165	.154	.142	.894	1.119
	Less_than_20	-.123	-.137	-.126	.440	2.271
	More_than_20	.238	.185	.172	.502	1.991
	Closed_terrestrial	-.084	-.103	-.095	.711	1.406
	Aquatic	-.001	.005	.004	.458	2.185
	Fossorial	-.089	-.060	-.055	.786	1.272

a. Dependent Variable: LogVol

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index
1	1	3.109	1.000
	2	1.872	1.289
	3	1.364	1.510
	4	1.051	1.720
	5	.895	1.864
	6	.668	2.157
	7	.437	2.667
	8	.292	3.261
	9	.168	4.301
	10	.142	4.679

Collinearity Diagnostics[a]

Model	Dimension	Variance Proportions				
		(Constant)	Singlephrase	Multiphrase	Complex_ multiphrase	Pairs
1	1	.02	.02	.01	.01	.01
	2	.00	.02	.00	.06	.00
	3	.00	.00	.04	.03	.24
	4	.00	.03	.23	.01	.00
	5	.00	.02	.00	.00	.03
	6	.02	.01	.10	.04	.66
	7	.00	.11	.01	.26	.00
	8	.01	.45	.05	.04	.03
	9	.21	.00	.00	.35	.02
	10	.73	.34	.54	.19	.01

Collinearity Diagnostics[a]

Model	Dimension	Variance Proportions				
		Less_than_20	More_than_20	Closed_ terrestrial	Aquatic	Fossorial
1	1	.02	.01	.01	.02	.00
	2	.04	.04	.04	.02	.00
	3	.01	.02	.00	.01	.12
	4	.00	.01	.03	.00	.20
	5	.00	.08	.23	.01	.24
	6	.00	.02	.07	.01	.07
	7	.32	.16	.00	.02	.02
	8	.00	.00	.29	.49	.02
	9	.50	.63	.25	.23	.08
	10	.12	.03	.08	.17	.25

a. Dependent Variable: LogVol

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-.9178	-.0390	-.6061	.25383	59
Std. Predicted Value	-1.228	2.234	.000	1.000	59
Standard Error of Predicted Value	.172	.388	.250	.060	59
Adjusted Predicted Value	-1.0818	.0720	-.6205	.28826	59
Residual	-1.36123	1.26943	.00000	.57361	59
Std. Residual	-2.181	2.034	.000	.919	59
Stud. Residual	-2.314	2.159	.011	1.002	59
Deleted Residual	-1.53136	1.43028	.01441	.68490	59
Stud. Deleted Residual	-2.426	2.247	.009	1.021	59
Mahal. Distance	3.425	21.426	8.847	4.734	59
Cook's Distance	.000	.115	.020	.028	59
Centered Leverage Value	.059	.369	.153	.082	59

a. Dependent Variable: LogVol

Scan Parameters

Notes: The following briefly detail the resolution and settings of µCT scans obtained for this project. In many cases data available for one scan was not available for another, so there is some degree of variation in the information for each species. All scans were performed without filtering unless otherwise indicated. Personal names that appear next to specimen numbers indicate people to whom we are grateful for being allowed access to pre-existing datasets; where no name appears, specimens were either scanned as part of this project, or by LW as part of earlier projects.

Abbreviations: FMNH, Field Museum of Natural History, Chicago; **FRIM**, Forest Research Institute, Malaysia; **LDUCZ**, Museum of Zoology, University College, London; **NHM**, Department of Zoology, The Natural History Museum, London; **TMM** and **TNHC**, Texas Memorial Museum, Austin; **UCA**, S. E. Evans Comparative Anatomy Collection, Department of Anatomy, University College London; **UCMZ**, Museum of Zoology, University of Cambridge; **UF**, Florida Museum of Natural History; **USNM**, Smithsonian Institution, United States National Museum of Natural History, Washington, DC; **YPM**, Yale Peabody Museum, Newhaven.

Squamata: Colubridae
Ahaetulla nasuta (NHM 1930.5.8.725)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (1871 slices output as DCM stack); pixel resolution 0.0271 mm^2, slice thickness 0.0271 mm (584 x 665 pixels); field of view 15.83 mm.

Crocodylia: Alligatoridae
Alligator mississipiensis (TMM M-983; Brochu 1999)
Specimen scanned was immature. Specimen scanned in the horizontal plane (135 slices) using an SMS 101 scanner that was built in the 1980s. Slice thickness 0.480 mm; interslice spacing 0.480 mm.

Squamata: Polycrotidae
Anolis grahami (NHM 1964.1782)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (955 slices output as DCM stack); pixel resolution 0.0267 mm^2, slice thickness 0.0267 mm (651 x 475 pixels); field of view 17.38 mm.

Squamata: Polycrotidae
Anolis sagrei (NHM 1964.179)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (954 slices output as DCM stack); pixel resolution 0.0267 mm^2, slice thickness 0.0267 mm (649 x 474 pixels); field of view 17.33 mm.

Squamata: Anomochilidae
Anomolochilus leonardii (FRIM 0026; Jessie Maisano)
Poor image quality due to both small size of specimen and movement during scanning. 1024x1024 16-bit TIFF images. II, 180 kV, 0.088 mA, slice thickness 2 lines (= 0.0144 mm), S.O.D. 21 mm, 1600 views, 4 samples per view, inter-slice spacing 2 lines (= 0.0144 mm), field of reconstruction 5.5 mm (maximum field of view 6.88 mm), reconstruction offset 10000, reconstruction scale 1500. Total slices = 553.

Struthioniformes: Apterygidae
Apteryx hastelquistii (NHM S/1972.1.21)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (1013 slices output as DCM stack); pixel resolution 0.0471 mm^2, slice thickness 0.0471 mm (584 x 665 pixels); field of view 15.83 mm.

Archaeopterygiformes: Archaeopterygidae (NHM 37001)
Scanned twice at the University of Texas at Austin, at 120 kV and 180 kV. Specimen scanned along coronal axis (two independent series of 1313 slices output as a 16-bit TIFF stack); pixel resolution 0.0205, slice thickness 0.0230 mm; field of view 21.0 mm.

Anseriformes: Anatidae
Aythya fuligula (NHM S/1987.27.1)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (944 slices output as DCM stack); pixel resolution 0.0361 mm^2, slice thickness 0.0361 mm (882 x 721 pixels); field of view 41.54 mm.

Falconiformes: Accipitridae
Buteo buteo (NHM S/2007.139.12)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (1354 slices output as DCM stack); pixel resolution 0.0420 mm^2, slice thickness 0.0420 mm (1034 x 1228 pixels); field of view 43.43 mm.

Crocodylia: Alligatoridae
Caiman crocodylus (FMNH 73711; Jessie Maisano)
Specimen scanned at along the coronal axis (945 slices). Slice thickness 0.142 mm; interslice spacing 0.142 mm; field of reconstruction of 67.0 mm. No other information available.

Struthioniformes: Casuariidae
Casuarius casuarius (NHM 1939.12.9.964)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (1469 slices output as 16-bit DCM stack); pixel resolution 0.1487 mm^2, slice thickness 0.1487 mm (694 x 690 pixels); field of view 103.2 mm.

Squamata: Viperidae
Cerastes cerastes (NHM 1930.5.8.952)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (954 slices output as DCM stack); pixel resolution 0.0267 mm^2, slice thickness 0.0267 mm (649 x 474 pixels); field of view 17.33 mm.

Squamata: Scincidae
Chalcides occelatus (YPM 12690; Jessie Maisano)
Specimen scanned along coronal axis (630 slices). Slice thickness 0.0409 mm; interslice spacing 0.0409 mm. No other information available.

Testudines: Cheloniidae
Chelonia mydas (NHM 1969.2864)
Scanned at the Royal Veterinary College in the axial axis at 120 Kv, no filter (138 slices output as 16-bit DCM stack). Pixel resolution 2.2968 mm^2 Slice thickness 1.5 mm (520 x 520 pixels); field of view 150 mm.

Testudines: Chelydridae
Chelydra serpenta (UF 22159; Jessie Maisano)
Specimen scanned along horizontal axis (570 slices). Slice thickness 0.246 mm; interslice spacing 0.246 mm; field of reconstruction of 107 mm. No other information available.

Ciconiiformes: Ciconidae
Ciconia ciconia (NHM 1859.9.6.393)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (1237 slices output as DCM stack); pixel resolution 0.0456 mm^2, slice thickness 0.0456 mm (1164 x 1232 pixels); field of view 53.08 mm.

Ciconiiformes: Ciconidae
Ciconia nigra (NHM S/1952.1.103)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (1378 slices output as DCM stack); pixel resolution 0.0400 mm^2, slice thickness 0.0400 mm (1234 x 1198 pixels); field of view 49.36 mm.

Passeriformes: Corvidae
Corvus corax (NHM S/1979.66.160)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (1379 slices output as DCM stack); pixel resolution 0.0430 mm^2, slice thickness 0.0430 mm (1107 x 1273 pixels); field of view 47.6 mm.

Squamata: Xatusiidae
Cricosaura typica (USNM 547842; Jessie Maisano)
1024 x 1024 16-bit TIFF images. II, 120 kV, 0.2 mA, slice thickness 2 lines (= 0.0152 mm), S.O.D. 22 mm, 1000 views, 8 samples per view, inter-slice spacing 2 lines (= 0.0152 mm), field of reconstruction 6 mm (maximum field of view 7.204 mm), reconstruction offset 10000, reconstruction scale 1020. Total slices = 645.

Crocodylia: Crocodilidae
Crocodylus acutus (FMNH 59071)
Scanned at O'Bleness Memorial Hospital, Athens, Ohio, 2008-03-11 on a GE LightSpeed Ultra Multislice at an energy of 120 kV, a power of 200 mA, and a slice thickness of 0.625 mm.

Crocodylia: Crocodilidae
Crocodylus intermedius (FMNH 75662)
Scanned at O'Bleness Memorial Hospital, Athens, Ohio, 2008-02-03 on a GE LightSpeed Ultra Multislice at an energy of 120 kV, a power of 200 mA, and a slice thickness of 0.625 mm.

Crocodylia: Crocodilidae
Crocodylus johnstonii (TMM M-6807; Jessie Maisano)
Skull scanned along coronal axis (771 slices); slice thickness 0.223 mm; interslice spacing 0.223 mm. No other information available.

Crocodylia: Crocodilidae
Crocodylus morelettii (TMM M-4980)
This specimen was scanned on 2003-08-21 along the coronal axis for a total of 663 slices. Each slice is 0.5 mm thick, with an interslice spacing of 0.5 mm and a field of reconstruction of 195.0 mm.

Anseriformes: Anatidae
Cygnus olor (NHM S/1995.11.1)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (1231 slices output as DCM stack); pixel resolution 0.0501 mm^2, slice thickness 0.0501 mm (584 x 665 pixels); field of view 15.83 mm.

Passeriformes: Dicruridae
Dicrurus paradiseus (NHM S/1969.1.163)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (914 slices output as DCM stack); pixel resolution 0.0373 mm^2, slice thickness 0.0373 mm (1175 x 1249 pixels); field of view 58.87 mm.

Squamata: Trogonophiidae
Diplometopon zarudnyi (FMNH 64429; Jessie Maisano)
1024 x 1024 16 bit TIF images. II, 180 kV, 0.133 mA, slice thickness = 2 lines (= 0.0192 mm), 1000 views, 5 samples per view, interslice spacing = 2 lines (= 0.0192 mm), field of reconstruction 9.5 mm (maximum field of view 9.57 mm). Total slices = 459.

Struthioniformes: Casuaridae
Dromaeus novaehollandiae (NHM S/2001.50.1)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (798 slices output as DCM stack); pixel resolution 0.0931 mm^2, slice thickness 0.0931 mm (913 x 838 pixels); field of view 85.00 mm.

Squamata: Scincidae
Eumeces schneideri (YPM 12688; Jessie Maisano)
Specimen scanned along coronal axis (645 1024 x 1024 pixel slices). Slice thickness 0.0532 mm; interslice spacing 0.0532 mm; field of reconstruction 20 mm. No other information available.

Squamata: Crotophytidae
Gambelia wislizenii (NHM 1792.568)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (624 slices output as DCM stack); pixel resolution 0.0272 mm^2, slice thickness 0.0272 mm (1192 x 845 pixels); field of view 32.42 mm.

Crocodylia: Gavialidae
Gavialis gangeticus (TMM M-5490; Jessie Maisano)
Scanned for Timothy Rowe of the University of Texas (Department of Geological Sciences) at Scientific Measurement Systems, Inc.; original interslice spacing and field of reconstruction unknown, estimated by measuring original specimen Field of reconstruction = 53 mm; interslice spacing 0.22760 mm for the original coronal slices.

Squamata: Gekkonidae
Gekko gecko (NHM 1983.65)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (578 slices output as DCM stack); pixel resolution 0.0414 mm^2, slice thickness 0.0414 mm (1435 x 858 pixels); field of view 59.41 mm.

Squamata: Anguidae
Gerrhonotus coeruleus (NHM 1964.1829)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (1244 slices output as DCM stack); pixel resolution 0.0184 mm^2, slice thickness 0.0184 mm (665 x 784 pixels); field of view 12.24 mm.

Squamata: Anguidae
Gerrhonotus infernalis (YPM 14379; Jessie Maisano)
1024 x 1024 16-bit TIFF images. II, 120 kV, 0.2 mA, slice thickness 2 lines (= 0.043 mm), S.O.D. 63 mm, 1000 views, 2 samples per view, inter-slice spacing 2 lines (= 0.043 mm), field of reconstruction 20 mm (maximum field of view 20.6 mm). Total slices = 845.

Squamata: Geckkonidae
Gymnodactylus geckoides (NHM 1978.346)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (512 slices output as DCM stack); pixel resolution 0.0203 mm^2, slice thickness 0.0203 mm (726 x 737 pixels); field of view 14.74 mm.

Squamata: Helodermatidae
Heloderma suspectum (TNHC 62766; Jessie Maisano)
1024 x 1024 16-bit TIFF images. II, 180 kV, 0.133 mA, slice thickness 2 lines (= 0.133 mm), inter-slice spacing 2 lines (= 0.133 mm), field of reconstruction 55.5 mm (maximum field of view 63.2468 mm). Ring-removal processing done by Rachel Racicot based on correction of raw sinogram data using IDL routine "RK_SinoRingProcSimul" with default parameters. Total slices = 555.

Squamata: Geckkonidae
Hemitheconyx caudicinctus (YPM 14381; Jessie Maisano)
1024 x 1024 16-bit TIFF images. II, 120 kV, 0.2 mA, slice thickness 2 lines (= 0.0599 mm), inter-slice spacing 2 lines (= 0.0599 mm), field of reconstruction 26 mm (maximum field of view 28.391 mm). Total slices = 555.

Squamata: Lanthanotidae
Lanthanotus borneensis (YPM 6057; Jessie Maisano)
Specimen was scanned along oblique axis (204 slices); slice thickness 0.09 mm; interslice spacing 0.09 mm. No other information available.

Squamata: Tropiduridae
Liolaemis chilensis (NHM 1970.1.20.135)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (692 slices output as DCM stack); pixel resolution 0.0233 mm^2, slice thickness 0.0233 mm (1002 x 1002 pixels); field of view 23.35 mm.

Passeriformes: Muscicapidae
Luscinia megarhynchos (NHM S/1968.4.14)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (1169 slices output as 16-bit DCM stack); pixel resolution 0.0373 mm^2, slice thickness 0.0373 mm (486 x 757 pixels); field of view 18.13 mm.

Psittaciformes: Psittacidae
Melopsittacus undulatus (NHM S/1966.51.59)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (830 slices output as 16-bit DCM stack); pixel resolution 0.0373 mm^2, slice thickness 0.0373 mm (569 x 586 pixels); field of view 21.22 mm.

Squamata: Elapidae
Naja naja (NHM 59.9.21.2)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (1249 slices output as DCM stack); pixel resolution 0.0343 mm^2, slice thickness 0.0343 mm (461 x 1265 pixels); field of view 15.81 mm.

Squamata: Gekkonidae
Nephrurus levis (YPM 12868; Jessie Maisano)
Specimen scanned along coronal axis (554 slices); slice thickness 0.0417 mm; interslice spacing 0.0417 mm; field of reconstruction 19.9 mm. No other information available.

Prophaethontiformes: Prophaethontidae
Prophaethon shrubsolei (NHM A683)
Scanned at the University of Texas at Austin along coronal axis at 180 kV with Aluminium filter (1110 slices output as 16 bit TIFF stack); pixel resolution 0.047 mm, slice thickness 0.101 mm, reconstruction 49 mm.

Odontopterygiiformes: Odontopterygidae
Odontopteryx toliapica (NHM 44096)
Scanned at the University of Texas at Austin along coronal axis at 180 kV with Aluminium filter (947slices output as 16 bit TIFF stack); pixel resolution 0.047 mm, slice thickness 0.101 mm, reconstruction 49 mm.

Squamata: Lacertidae
Podarcis scicula (NHM 1978.1441)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (627 slices output as DCM stack); pixel resolution 0.0229 mm^2, slice thickness 0.0229 mm (1114 x 1020 pixels); field of view 25.51 mm.

Psittaciformes: Psittacidae
Psittacus erithacus (NHM S/1973.66.109)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (1017 slices output as DCM stack); pixel resolution 0.0361 mm^2, slice thickness 0.0361 mm (1204 x 1124 pixels); field of view 43.46 mm.

Squamata: Gekkonidae
Ptyodactylus hasselquistii (NHM 1900.9.22.15)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (954 slices output as DCM stack); pixel resolution 0.0267 mm^2, slice thickness 0.0267 mm (651 x 474 pixels); field of view 17.38 mm.

Squamata: Boiidae
Python morulus (TNHC 62769; Jessie Maisano)
Specimen was scanned from bottom to top; images flipped. 1024 x 1024 16-bit TIFF images. II, 120 kV, 0.2 mA, slice thickness 2 lines (= 0.1055 mm), inter-slice spacing 2 lines (= 0.1055 mm), field of reconstruction 45 mm (maximum field of view 50.08964 mm). Total slices = 810.

Passeriformes: Regulidae
Regulus regulus (NHM Unregistered Palaeontology Comparative Collection (6)9)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (657 slices output as DCM stack); pixel resolution 0.014 mm^2, slice thickness 0.014 mm (481 x 740 pixels); field of view 6.73 mm.

Strigiformes: Strigidae
Speleotyto cunicularia (NHM S/1986.75.13)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (1327 slices output as DCM stack); pixel resolution 0.0361 mm^2, slice thickness 0.0361 mm (830 x 1155 pixels); field of view 29.96 mm.

Sphenisciformes: Spheniscidae
Spheniscus demersus (UF 21341; Nina Triche)
Specimen scanned along the coronal axis (954 slices). Slice thickness 0.119 mm; interslice spacing 0.119 mm; field of reconstruction of 56 mm. No other information available.

Rhynchocephalia: Sphenodontidae
Sphenodon punctatus (LDUCZ x036; Marc Jones)
1000 x 1000 16-bit TIFF images. Source to object distance 389.9183 mm, Resolution (X) 0.164527 mm, Resolution (Y) 0.164527 mm; voxel size 0.0794 mm^3. No other information available.

Struthioniformes: Struthionidae
Struthio camelus (NHM 1927.2.5.1)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (773 slices output as DCM stack); pixel resolution 0.1372 mm^2, slice thickness 0.1372 mm (570 x 735 pixels); field of view 78.20 mm.

Passeriformes: Estrildidae
Taeniopygia guttata (NHM S/2002.46.1)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (866 slices output as DCM stack); pixel resolution 0.0373 mm^2, slice thickness 0.0373 mm (414 x 586 pixels); field of view 15.44 mm.

Squamata: Scincidae
Tiliqua rugosa (NHM 29a)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (1177 slices output as DCM stack); pixel resolution 0.0461 mm^2, slice thickness 0.0461 mm (520 x 785 pixels); field of view 23.97 mm.

Crocodylia: Crocodilidae
Tomistoma schlegelii (USNM 211322)
Scanned at O'Bleness Memorial Hospital, Athens, Ohio, 2008-00 on a GE LightSpeed Ultra Multislice at an energy of 120 kV, a power of 200 mA, and a slice thickness of 0.625 mm.

Squamata: Scincidae
Trilobolonotus gracilis (NHM 1938.5.7.59)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (659 slices output as DCM stack); pixel resolution 0.0288 mm^2, slice thickness 0.0288 mm (1284 x 866 pixels); field of view 36.98 mm.

Strigiformes: Tytonidae
Tyto alba (NHM S/1981.39.1)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (1082 slices output as DCM stack); pixel resolution 0.0392 mm^2, slice thickness 0.0392 mm (929 x 1095 pixels); field of view 37.98 mm.

Squamata: Agamidae
Uromastyx hardwickii (UCA.5; Jessie Maisano)
Scanned in horizontal orientation. 1024 x 1024 16-bit TIFF images. II, 120 kV, 0.2 mA, slice thickness 1 line (= 0.0588 mm), inter-slice spacing 1 line (= 0.0588 mm), field of reconstruction 55 mm (maximum field of view 55.70961 mm. Total slices = 486.

Squamata: Varanidae
Varanus exanthematicus (NHM 1932.6.1.12)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (1412 slices output as DCM stack); pixel resolution 0.0415 mm^2, slice thickness 0.0415 mm (480 x 1062 pixels); field of view 19.92 mm.

Squamata: Varanidae
Varanus giganteus (UCMZ R.9586; M. Lowe)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along horizontal axis (507 slices output as DCM stack); pixel resolution 0.062 mm^2, slice thickness 0.062 mm (2000 x 1055 pixels); field of view 124 mm.

Squamata: Varanidae
Varanus niloticus (NHM 97.5.31.1)
Scanned at Metris X-Tek, Tring, UK, using a Metris X-Tek HMX ST CT with Perkin Elmer Flat panel. Specimen scanned along axial axis (1008 slices output as DCM stack); pixel resolution 0.0851 mm^2, slice thickness 0.0851 mm (701 x 874 pixels); field of view 60.17 mm.

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Use of constriction landmark for measuring ECD length.
In *Sphenodon* and the Testudines examined here the constriction landmark for ECD length measurements is difficult to find. A thorough survey of inner ear morphology across Testudines would be worthwhile to investigate whether the lack of this feature was common to all turtles, but lay outside the scope of the present work. The dorsal extent of the fenestra vestibuli was initially considered as the proximal limit of the cochlear duct length measurement, but the impression of the fenestra vestibuli was difficult to detect on many of our dataset scans. The constriction between the saccule and cochlear duct was used because this feature was clear on all but three of the taxa included.

Scaling using basicranial length
Basicranial length was chosen as a scaling factor rather than body mass and similar metrics, because it is more closely linked to the size of the braincase and is a straightforward procedure. Furthermore, accurate mass estimates were unavailable for many of the taxa in our dataset. Basicranial length is often used as a proxy for body size in other studies that involve scaling issues. We believe that basicranial length remains the best approach to mitigate size effects, particularly considering the wide range of body forms and phylogenetic groups in our dataset (which includes groups as disparate as turtles and birds).

Ontogenetic factors
Ontogeny is not a factor in our study as only adult animals were included. There is some evidence that the middle ear of squamates may change during ontogeny, but the length of the lizard basilar papilla (and hence the cochlear duct) remains constant throughout life (Wever, 1978; Miller, 1980). In the case of birds, the size and architecture of the braincase in volant forms is generally fixed on leaving the nest, as the cranial bones become fully fused and the sutures entirely obliterated. Consequently ontogeny is probably an unimportant factor using these methods, although this remains to be tested, and is an avenue for further study.

Choice of divisions for sociality variables
In this analysis aggregation sizes beyond pair bonding were divided into groups of 20 or less and groups of over 20. This dividing value was chosen because it was useful for finer distinctions within birds and crocodiles (squamates being mostly solitary). Analysis of solitary forms, species that form pairs and species that form aggregations larger than pairs would be another way to code the analysis, but would have provided only three categories and potentially may have missed patterns in the data. A larger dataset would allow a greater number of sociality-related categories to be tested that relate to specific groups, but until we possess such a dataset the 20 individual division has proved to be useful for the purposes of this study.

Inclusion of *Tyto alba* (barn owl)
In our regression plots the barn owl (*Tyto alba*) appears to be an outlier. However, closer inspection reveals that other species are equally distant from the regression line, albeit on the opposite side. We had already expected this relationship based on earlier research (e.g., Gleich *et al*., 2005) and we specifically chose this species because of its long basilar

papilla and wide hearing range. Other Strigiformes have wide hearing ranges and long basilar papillae, as do (unrelated) oilbirds. If representatives of these taxa had been available for inclusion in the analysis, the barn owl would not appear such an outlier. It should also be noted that *Tyto alba* is part of the range of biological variation within Aves, and inclusion of this taxon is therefore justified on these grounds.

Considerations of taxonomic groups

In our discussion we state that the relatively longer ECD of birds compared with the other groups tested may have had an effect of the behavioural correlations. It would be useful to investigate how the ECD measurements correlate with the behavioural variables between the main groups. Unfortunately this was not possible with our dataset. Our sample was chosen to represent as wide a range of sauropsid inner ear anatomies as possible, and consequently does not include enough members of any single clade to make investigations on a clade-by-clade basis statistically significant. Splitting Aves from the rest of Sauropsida simply because birds have longer cochlear ducts (and wider hearing ranges) than squamates, crocodiles and turtles would be questionable from a phylogenetic perspective. More reasonable in this case would be to separately test Archosauria (crocodiles and birds), Testudines and Squamata (which would more accurately reflect the evolutionary relationships of the taxa included). This would nonetheless be less feasible than separately testing Aves and 'Reptilia' (in a paraphyletic sense) since we have only two data points for Testudines. We believe our results are robust within the range of biological variation of Sauropsida, which was the clade of interest in our study.

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Supplementary References

Notes: The following references relate to sources of data used to code auditory, vocal, ecological and behavioural variables analysed in this project (see Metric_Data_and_Variables.xls).

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Sensitivity data

Order	Family	Genus	Species	Range (Hz) ≤ 30dB	Overall range (Hz)	Mean (Hz)	Ref
Crocodiliformes	Crocodilidae	*Crocodylus*	*acutus*	300-3000	2700	1650	Wever 1978
Crocodiliformes	Alligatoridae	*Alligator*	*mississipiensis*	100-1000	900	550	Wever 1978
Crocodiliformes	Alligatoridae	*Caiman*	*crocodylus*	300-2000	1700	1150	Manley 1990
Testudines	Cheloniidae	*Chelonia*	*mydas*	150-500	350	325	Wever 1978
Testudines	Chelydridae	*Chelydra*	*serpenta*	200-1000	800	600	Wever 1978
Rhynchocephalia	Sphenodontidae	*Sphenodon*	*punctatus*	100-800	700	450	Dooling et al. 2000
Squamata	Gekkonidae	*Gekko*	*gecko*	220-5000	4780	2610	Manley 2000
Squamata	Gekkonidae	*Ptyodactylus*	*hasselquistii*	300-2500	2200	1400	Wever 1978
Squamata	Gekkonidae	*Hemitheconyx*	*caudicinctus*	220-1800	1580	1010	Wever 1978
Squamata	Lacertidae	*Podarcis*	*scicula*	500-3000	2500	1750	Manley 2000
Squamata	Anguidae	*Gerrhonotus*	*multicarinatus*	600-3000	2400	1800	Manley 2000
Squamata	Scincidae	*Tiliqua*	*rugosa*	200-4000	3800	2100	Manley 1990
Squamata	Scincidae	*Chalcides*	*occelatus*	300-2000	1700	1150	Wever 1978
Squamata	Varanidae	*Varanus*	*niloticus*	400-1500	1100	950	Wever 1978
Squamata	Crotophytidae	*Gambelia (Crotaphytus)*	*wislizenii*	300-700	400	500	Wever 1979
Squamata	Polycrotidae	*Anollis*	*sagrei*	200-2000	1800	1100	Wever 1978
Squamata	Agamidae	*Uromastyx*	*hardwickii*	300-3000	2700	1650	Wever 1978
Squamata	Trogonophiidae	*Diplometopon*	*zarudnyi*	700-1500	800	1100	Wever 1978
Strigiformes	Tytonidae	*Tyto*	*alba*	500-9500	9000	5000	Köppl · and Gleich 2007
Psittaciformes	Psittacidae	*Melopsittacus*	*undulatus*	300-7000	6700	3650	Fay 1988
Struthioniformes	Casuariidae	*Dromaius*	*novaehollandiae*	80-3500	3420	1790	Manley et al. 1997
Sphenisciformes	Spheniscidae	*Spheniscus*	*demersus*	600-4000	3400	2300	Wever et al. 1969
Passeriformes	Corvidae	*Corvus*	sp.	100-5000	4900	2550	Fay 1988
Passeriformes	Estrildidae	*Taeniopygia*	*guttata*	1000-5700	4700	3350	Fay 1988

Measurements

Specimen	Order	Family	Genus	Species	Group Variables	Common Name	Side	Vocalisation complexity	Max. Aggregation	Habitat	Length (mm) (Raw)	RC width (mm) (Raw)	ML Width (mm) (Raw)	Volume (mm3) (Raw)	Basicranial length (mm)	Max. Length (Scaled)	*Mean* Length (Scaled)	RC Width (Scaled)	*Mean* RC Width (Scaled)	ML Width (Scaled)	*Mean* ML Width (Scaled)	Volume (Scaled)	*Mean* Volume (Scaled)	References		
Brochu 1999 monograph	Crocodylia	Alligatoridae	*Alligator*	*mississipiensis*	Crocodylia	American alligator	Left	1	1	0	5.88	5.22	4.53	28.67	24.67	0.2383	0.1821	0.2116	0.1785	0.1836	0.1386	1.1621	0.7782	Burghardt 1977; Beach 1944; Gans & Madderson 1973;Garrick and Lang 1977;	*Alligator*	*mississipiensis*
Brochu 1999 monograph	Crocodylia	Alligatoridae	*Alligator*	*mississipiensis*	Crocodylia	American alligator	Right	1	1	0	5.17	5.56	4.61	28.67	24.67	0.2096		0.2254		0.1869		1.1621		Burghardt 1977; Beach 1944; Gans & Madderson 1973;Garrick and Lang 1977;	*Alligator*	*mississipiensis*
USNM211233	Crocodylia	Alligatoridae	*Alligator*	*mississipiensis*	Crocodylia	American alligator	Left	1	1	0	1.39	0.94	0.64	0.15	14.1	0.0985		0.0986		0.0453		0.0106		Beach 1944; Gans & Madderson 1973;Garrick and Lang 1977;	*Alligator*	*mississipiensis*
FMNH73438	Crocodylia	Alligatoridae	*Caiman*	*crocodilus*	Crocodylia	Spectacled caiman	Left	1	2	0	0.98	0.90	0.61	0.11	8.25	0.1188	0.2366	0.1090	0.1917	0.0739	0.1361	0.0133	0.7063	Burghardt 1977; Schaller & Gransden Crawshaw 1982	*Caiman*	*crocodylus*
Digimorph	Crocodylia	Alligatoridae	*Caiman*	*crocodilus*	Crocodylia	Spectacled caiman	Left	1	2	0	6.55	5.20	3.53	22.85	22.25	0.2943		0.2337		0.1587		1.0270		Burghardt 1977; Schaller & Gransden Crawshaw 1982	*Caiman*	*crocodylus*
Digimorph	Crocodylia	Alligatoridae	*Caiman*	*crocodilus*	Crocodylia	Spectacled caiman	Right	1	2	0	6.60	5.17	3.91	24.00	22.25	0.2966		0.2324		0.1757		1.0787		Burghardt 1977; Schaller & Gransden Crawshaw 1982	*Caiman*	*crocodylus*
FMNH 75662	Crocodylia	Crocodilidae	*Crocodylus*	*intermedius*	Crocodylia	Orinoco crocodile	Left	1	1	0	1.11	0.69	0.35	0.07	9.68	0.1147	0.1147	0.0713	0.0713	0.3616	0.3616	0.0072	0.0072	Thorbjarnarson & Hernández 1993	*Crocodylus*	*intermedius*
FMNH59071	Crocodylia	Crocodilidae	*Crocodylus*	*acutus*	Crocodylia	American crocodile	Left	1	2	0	1.28	0.97	0.60	0.18	12.90	0.0992	0.0992	0.0752	0.0752	0.0465	0.0465	0.0139	0.0139	Burghardt 1977; Garrick and Lang 1977	*Crocodylus*	*acutus*
OUVC 10425	Crocodylia	Crocodilidae	*Crocodylus*	*johnstoni*	Crocodylia	Johnston's crocodile	Left	1	1	0	1.24	0.44	0.64	0.06	6.68	0.1856	0.1856	0.0659	0.0659	0.0958	0.0958	0.0089	0.0089	Webb et al. 1983	*Crocodylus*	*johnstoni*
TMM M-4980	Crocodylia	Crocodilidae	*Crocodylus*	*morelettii*	Crocodylia	Morelet's crocodile	Left	1	1	0	11.24	8.60	5.73	102.14	72.01	0.1560	0.1560	0.1194	0.1194	0.0796	0.0796	1.4184	1.4184	http://animaldiversity.ummz.umich.edu/site/accounts/information/Crocodylus_moreletii.html	*Crocodylus*	*moreleti*
USNM211322	Crocodylia	Crocodilidae	*Tomistoma*	*schlegelii*	Crocodylia	False gharial	Left	1	1	0	2.25	1.09	0.70	0.32	12.22	0.1841	0.1841	0.0891	0.0891	0.0573	0.0573	0.0261	0.0261	Bezuijen et al. 2001	*Tomistoma*	*schlegelii*
Digimorph	Crocodylia	Gavialidae	*Gavialis*	*gangeticus*	Crocodylia	Gharial	Left	1	1	0	6.42	4.25	2.60	25.18	34.97	0.1836	0.1494	0.1215	0.1308	0.0743	0.0814	0.7200	0.7409	Gans & Madderson 1973	*Gavialis*	*gangeticus*
Digimorph	Crocodylia	Gavialidae	*Gavialis*	*gangeticus*	Crocodylia	Gharial	Right	1	1	0	4.03	4.90	3.09	26.64	34.97	0.1152		0.1401		0.0884		0.7618		Gans & Madderson 1973	*Gavialis*	*gangeticus*
1969.2864	Testudines	Cheloniidae	*Chelonia*	*mydas*	Testudines	Green turtle	Left	1	0	0	8.46	10.02	7.37	180.35	98.89	0.0855	0.0841	0.1013	0.0941	0.0745	0.0653	1.8237	1.4266	Cook and Forrest 2005; http://www.cccturtle.org	*Chelonia*	*mydas*
1969.2864	Testudines	Cheloniidae	*Chelonia*	*mydas*	Testudines	Green turtle	Right	1	0	0	8.19	8.60	5.56	101.82	98.89	0.0828		0.0869		0.0562		1.0296		Cook and Forrest 2005; http://www.cccturtle.org	*Chelonia*	*mydas*
Digimorph	Testudines	Chelydridae	*Chelydra*	*serpenta*	Testudines	Snapping turtle	Left	0	0	0	5.04	7.69	7.32	125.14	51.80	0.0972	0.0910	0.1484	0.1449	0.1413	0.1326	2.4158	1.9475	Burghardt 1977; http://animaldiversity.ummz.umich.edu/site/accounts/information/Chelydra_serpentina.html	*Chelydra*	*serpenta*
Digimorph	Testudines	Chelydridae	*Chelydra*	*serpenta*	Testudines	Snapping turtle	Right	0	0	0	4.40	7.33	6.42	76.63	51.80	0.0849		0.1415		0.1239		1.4793		Burghardt 1977; http://animaldiversity.ummz.umich.edu/site/accounts/information/Chelydra_serpentina.html	*Chelydra*	*serpenta*
LDUCZ x036	Rhynchocephalia	Sphenodontidae	*Sphenodon*	*punctatus*	Rhynchocephalia	Tuatara	Left	1	0	1	3.82	4.55	2.88	25.76	19.70	0.1939	0.1964	0.2310	0.2310	0.1462	0.1545	1.3076	1.4062	Gillingham et al. 1995; http://www.tigr.org/reptiles/families/Sphenodontidae.html	*Sphenodon*	*punctatus*
LDUCZ x036	Rhynchocephalia	Sphenodontidae	*Sphenodon*	*punctatus*	Rhynchocephalia	Tuatara	Right	1	0	1	3.92	4.55	3.21	28.30	19.70	0.1990		0.2310		0.1629		1.4365		Gillingham et al. 1995; http://www.tigr.org/reptiles/families/Sphenodontidae.html	*Sphenodon*	*punctatus*
1983.65	Squamata	Gekkonidae	*Gekko*	*gecko*	Squamata	Tokay gecko	Left	2	0	1	2.10	2.78	2.00	3.66	8.98	0.2339	0.2210	0.3096	0.3112	0.2227	0.2221	0.4076	0.4092	Gans & Madderson 1973; Marcellini 1977; Tang et al. 2001; http://www.tigr.org/reptiles/families/Gekkonidae.html	*Gekko*	*gecko*
1983.65	Squamata	Gekkonidae	*Gekko*	*gecko*	Squamata	Tokay gecko	Right	2	0	1	1.87	2.81	1.99	3.69	8.98	0.2082		0.3129		0.2216		0.4109		Gans & Madderson 1973; Marcellini 1977; Tang et al. 2001; http://www.tigr.org/reptiles/families/Gekkonidae.html	*Gekko*	*gecko*
1900.9.22.15	Squamata	Gekkonidae	*Ptyodactylus*	*hasselquistii*	Squamata	Fan-tailed gecko	Left	2	0 (2 reported (crevices))	1	1.44	1.45	1.05	0.64	6.20	0.2323	0.2040	0.2339	0.2395	0.1694	0.1766	0.1032	0.1032	Frankenberg 1974; Marcellini 1977; http://www.tigr.org/reptiles/families/Gekkonidae.html	*Ptyodactylus*	*hasselquistii*
1900.9.22.15	Squamata	Gekkonidae	*Ptyodactylus*	*hasselquistii*	Squamata	Fan-tailed gecko	Right	2	0 (2 reported (crevices))	1	1.09	1.52	1.14	0.64	6.20	0.1758		0.2452		0.1839		0.1032		Frankenberg 1974; Marcellini 1977; http://www.tigr.org/reptiles/families/Gekkonidae.html	*Ptyodactylus*	*hasselquistii*
1978.346	Squamata	Gekkonidae	*Gymnodactylus*	*geckoides*	Squamata	Naked-toed gecko	Left	0	0	1	1.13	1.42	0.69	0.41	4.48	0.2522	0.2879	0.3170	0.3158	0.1540	0.1562	0.0915	0.0904	Evans 1936; Marcellini 1977; Vitt 1986; Vanzolini 2004; http://www.tigr.org/reptiles/families/Gekkonidae.html	*Gymnodactylus*	*geckoides*
1978.346	Squamata	Gekkonidae	*Gymnodactylus*	*geckoides*	Squamata	Naked-toed gecko	Right	0	0	1	1.45	1.41	0.71	0.40	4.48	0.3237		0.3147		0.1585		0.0893		Evans 1936; Marcellini 1977; Vitt 1986; Vanzolini 2004; http://www.tigr.org/reptiles/families/Gekkonidae.html	*Gymnodactylus*	*geckoides*
Digimorph	Squamata	Gekkonidae	*Hemitheconyx*	*caudicinctus*	Squamata	African fat-tailed gecko	Left	2	0	1	2.07	3.24	1.92	3.32	9.98	0.2074	0.2054	0.3246	0.3356	0.1924	0.2084	0.3327	0.3407	Marcellini 1977; http://www.tigr.org/reptiles/families/Gekkonidae.html	*Hemitheconyx*	*caudicinctus*
Digimorph	Squamata	Gekkonidae	*Hemitheconyx*	*caudicinctus*	Squamata	African fat-tailed gecko	Right	2	0	1	2.03	3.46	2.24	3.48	9.98	0.2034		0.3467		0.2244		0.3487		Marcellini 1977; http://www.tigr.org/reptiles/families/Gekkonidae.html	*Hemitheconyx*	*caudicinctus*
Digimorph	Squamata	Gekkonidae	*Nephrurus*	*levis*	Squamata	Knob-tailed gecko	Left	2	0	1	1.33	1.98	1.35	0.99	7.56	0.1759	0.1799	0.2619	0.2791	0.1786	0.1792	0.1310	0.1376	Marcellini 1977; http://www.tigr.org/reptiles/families/Gekkonidae.html	*Nephrurus*	*levis*
Digimorph	Squamata	Gekkonidae	*Nephrurus*	*levis*	Squamata	Knob-tailed gecko	Right	2	0	1	1.39	2.24	1.36	1.09	7.56	0.1839		0.2963		0.1799		0.1442		Marcellini 1977; http://www.tigr.org/reptiles/families/Gekkonidae.html	*Nephrurus*	*levis*
1964.1829	Squamata	Anguidae	*Gerrhonotus*	*coeruleus*	Squamata	Northern alligator lizard	Left	0	0	2	1.02	1.42	0.99	0.49	7.38	0.1382	0.1355	0.1924	0.2114	0.1341	0.1334	0.0664	0.0677	http://www.tigr.org/reptiles/families/Anguidae.html	*Gerrhonotus*	*coeruleus*
1964.1829	Squamata	Anguidae	*Gerrhonotus*	*coeruleus*	Squamata	Northern alligator lizard	Right	0	0	2	0.98	1.70	0.98	0.51	7.38	0.1328		0.2304		0.1328		0.0691		http://www.tigr.org/reptiles/families/Anguidae.html	*Gerrhonotus*	*coeruleus*
Digimorph	Squamata	Anguidae	*Gerrhonotus*	*infernalis*	Squamata	Texas alligator lizard	Left	0	0	1	1.36	2.33	1.29	1.19	9.33	0.1458	0.1517	0.2497	0.2567	0.1383	0.1372	0.1275	0.1286	http://www.tigr.org/reptiles/families/Anguidae.html	*Gerrhonotus*	*infernalis*
Digimorph	Squamata	Anguidae	*Gerrhonotus*	*infernalis*	Squamata	Texas alligator lizard	Right	0	0	1	1.47	2.46	1.27	1.21	9.33	0.1576		0.2637		0.1361		0.1297		http://www.tigr.org/reptiles/families/Anguidae.html	*Gerrhonotus*	*infernalis*
1978.1441	Squamata	Lacertidae	*Podarcis*	*sicula*	Squamata	Italian wall lizard	Left	1	0	2	0.97	1.40	0.94	0.41	5.29	0.1834	0.1834	0.2647	0.2628	0.1777	0.1805	0.0775	0.0794	Ouboter 1979; http://www.tigr.org/reptiles/families/Lacertidae.html	*Podarcis*	*sicula*
1978.1441	Squamata	Lacertidae	*Podarcis*	*sicula*	Squamata	Italian wall lizard	Right	1	0	2	0.97	1.38	0.97	0.43	5.29	0.1834		0.2609		0.1834		0.0813		Ouboter 1979; http://www.tigr.org/reptiles/families/Lacertidae.html	*Podarcis*	*sicula*
1938.5.7.59	Squamata	Scincidae	*Tribolonotus*	*gracilis*	Squamata	Crocodile skink	Left	1	0	3	1.92	2.39	1.57	2.05	8.87	0.2165	0.2007	0.2694	0.2700	0.1770	0.1792	0.2311	0.2350	http://www.tigr.org/reptiles/families/Scincidae.html	*Tribolonotus*	*gracilis*
1938.5.7.59	Squamata	Scincidae	*Tribolonotus*	*gracilis*	Squamata	Crocodile skink	Right	1	0	3	1.64	2.40	1.61	2.12	8.87	0.1849		0.2706		0.1815		0.2390		http://www.tigr.org/reptiles/families/Scincidae.html	*Tribolonotus*	*gracilis*
29a	Squamata	Scincidae	*Tiliqua*	*rugosa*	Squamata	Blue-tongued skink	Left	0	0 (1 for months in a year)	3	2.59	3.91	2.77	8.01	15.86	0.1633	0.1469	0.2465	0.2565	0.1747	0.1778	0.5050	0.5454	http://www.tigr.org/reptiles/families/Scincidae.html	*Tiliqua*	*rugosa*
29a	Squamata	Scincidae	*Tiliqua*	*rugosa*	Squamata	Blue-tongued skink	Right	0	0 (1 for months in a year)	3	2.07	3.91	2.87	9.29	15.86	0.1305		0.2465		0.1810		0.5858		http://www.tigr.org/reptiles/families/Scincidae.html	*Tiliqua*	*rugosa*
Digimorph	Squamata	Scincidae	*Chalcides*	*occelatus*	Squamata	Ocellated skink	Left	0	0	3	1.46	1.46	1.01	0.59	6.85	0.2131	0.1912	0.2131	0.2189	0.1474	0.1467	0.0861	0.0890	http://www.tigr.org/reptiles/families/Scincidae.html	*Chalcides*	*occelatus*
Digimorph	Squamata	Scincidae	*Chalcides*	*occelatus*	Squamata	Ocellated skink	Right	0	0	3	1.16	1.54	1.00	0.63	6.85	0.1693		0.2248		0.1460		0.0920		http://www.tigr.org/reptiles/families/Scincidae.html	*Chalcides*	*occelatus*
Digimorph	Squamata	Scincidae	*Eumeces*	*schneideri*	Squamata	Schneider's skink	Left	0	0	1	1.73	1.84	1.25	1.31	9.43	0.1835	0.1750	0.1951	0.1977	0.1326	0.1326	0.1389	0.1336	http://www.tigr.org/reptiles/families/Scincidae.html	*Eumeces*	*schneideri*
Digimorph	Squamata	Scincidae	*Eumeces*	*schneideri*	Squamata	Schneider's skink	Right	0	0	1	1.57	1.89	1.25	1.21	9.43	0.1665		0.2004		0.1326		0.1283		http://www.tigr.org/reptiles/families/Scincidae.html	*Eumeces*	*schneideri*
Digimorph	Squamata	Xatusiidae	*Cricosaura*	*typica*	Squamata	Cuban night lizard	Left	0	0	2	0.66	0.83	0.46	0.09	3.21	0.2056	0.2009	0.2586	0.2477	0.1433	0.1386	0.0280	0.0280	http://www.tigr.org/reptiles/families/Xantusiidae.html	*Cricosaura*	*typica*
Digimorph	Squamata	Xatusiidae	*Cricosaura*	*typica*	Squamata	Cuban night lizard	Right	0	0	2	0.63	0.76	0.43	0.09	3.21	0.1963		0.2368		0.1340		0.0280		http://www.tigr.org/reptiles/families/Xantusiidae.html	*Cricosaura*	*typica*
1932.6.1.12	Squamata	Varanidae	*Varanus*	*exanthematicus*	Squamata	Savannah monitor	Left	0	0	1	2.13	2.73	1.81	3.55	15.70	0.1357	0.1401	0.1739	0.1821	0.1153	0.1185	0.2261	0.2388	http://www.tigr.org/reptiles/families/Varanidae.html	*Varanus*	*exanthematicus*
1932.6.1.12	Squamata	Varanidae	*Varanus*	*exanthematicus*	Squamata	Savannah monitor	Right	0	0	1	2.27	2.99	1.91	3.95	15.70	0.1446		0.1904		0.1217		0.2516		http://www.tigr.org/reptiles/families/Varanidae.html	*Varanus*	*exanthematicus*
97.5.31.1	Squamata	Varanidae	*Varanus*	*niloticus*	Squamata	Nile monitor	Left	0	0	1	3.40	3.43	2.78	9.78	36.79	0.0924	0.0869	0.0932	0.0937	0.0756	0.0688	0.2658	0.2473	http://www.tigr.org/reptiles/families/Varanidae.html	*Varanus*	*niloticus*
97.5.31.1	Squamata	Varanidae	*Varanus*	*niloticus*	Squamata	Nile monitor	Right	0	0	1	3.00	3.47	2.28	8.42	36.79	0.0815		0.0943		0.0620		0.2289		http://www.tigr.org/reptiles/families/Varanidae.html	*Varanus*	*niloticus*
UCMZ R.9586	Squamata	Varanidae	*Varanus*	*giganteus*	Squamata	Perentie	Left	0	0	1	2.29	2.95	2.14	4.63	26.35	0.0869	0.0950	0.1120	0.1064	0.0812	0.0800	0.1757	0.1685	http://www.tigr.org/reptiles/families/Varanidae.html	*Varanus*	*giganteus*
UCMZ R.9586	Squamata	Varanidae	*Varanus*	*giganteus*	Squamata	Perentie	Right	0	0	1	2.72	2.66	2.09	4.25	26.35	0.1032		0.1009		0.0793		0.1613		http://www.tigr.org/reptiles/families/Varanidae.html	*Varanus*	*giganteus*
Digimorph	Squamata	Helodermatidae	*Heloderma*	*suspectum*	Squamata	Gila monster	Left	0	0	1	1.92	2.79	2.31	4.09	16.61	0.1156	0.1108	0.1680	0.1619	0.1391	0.1255	0.2462	0.2302	http://www.tigr.org/reptiles/families/Helodermatidae.html	*Heloderma*	*suspectum*
Digimorph	Squamata	Helodermatidae	*Heloderma*	*suspectum*	Squamata	Gila monster	Right	0	0	1	1.76	2.59	1.86	3.56	16.61	0.1060		0.1559		0.1120		0.2143		http://www.tigr.org/reptiles/families/Helodermatidae.html	*Heloderma*	*suspectum*
Digimorph	Squamata	Lanthanotidae	*Lanthanotus*	*borneensis*	Squamata	Earless monitor	Left	0	0	3	0.90	1.92	1.20	0.79	7.42	0.1213	0.1347	0.2588	0.2837	0.1617	0.1725	0.1065	0.1341	http://www.tigr.org/reptiles/families/Lanthanotidae.html	*Lanthanotus*	*borneensis*
Digimorph	Squamata	Lanthanotidae	*Lanthanotus*	*borneensis*	Squamata	Earless monitor	Right	0	0	3	1.10	2.29	1.36	1.20	7.42	0.1482		0.3086		0.1833		0.1617		http://www.tigr.org/reptiles/families/Lanthanotidae.html	*Lanthanotus*	*borneensis*
1792.568	Squamata	Crotophytidae	*Gambelia*	*wislizenii*	Squamata	Long-nosed leopard lizard	Left	1	0	1	1.18	1.90	1.49	1.06	7.82	0.1509	0.1605	0.2430	0.2494	0.1905	0.1624	0.1355	0.1304		*Gambelia*	*wislizenii*
1792.568	Squamata	Crotophytidae	*Gambelia*	*wislizenii*	Squamata	Long-nosed leopard lizard	Right	1	0	1	1.33	2.00	1.05	0.98	7.82	0.1701		0.2558		0.1343		0.1253			*Gambelia*	*wislizenii*
1970.1.20.135	Squamata	Tropiduridae	*Liolaemis*	*chilensis*	Squamata	No common name	Left	1	0	1	1.33	1.29	1.00	4.14	6.71	0.1982	0.1885	0.1923	0.1960	0.1490	0.1721	0.6170	0.6401	Carothers et al. 2001	*Liolaemis*	*chilensis*
1970.1.20.135	Squamata	Tropiduridae	*Liolaemis*	*chilensis*	Squamata	No common name	Right	1	0	1	1.20	1.34	1.31	4.45	6.71	0.1788		0.1997		0.1952		0.6632			*Liolaemis*	*chilensis*
1964.1782	Squamata	Polycrotidae	*Anolis*	*grahami*	Squamata	Jamaican anole	Left	2	0	2	0.82	1.22	0.88	0.29	10.75	0.0763	0.0823	0.1135	0.1093	0.0819	0.0795	0.0270	0.0265	Milton & Jenssen 1979; Losos & Thorpe 2004;	*Anolis*	*grahami*
1964.1782	Squamata	Polycrotidae	*Anolis*	*grahami*	Squamata	Jamaican anole	Right	2	0	2	0.95	1.13	0.83	0.28	10.75	0.0884		0.1051		0.0772		0.0260		Milton & Jenssen 1979; Losos & Thorpe 2004;	*Anolis*	*grahami*
1964.179	Squamata	Polycrotidae	*Anolis*	*sagrei*	Squamata	Brown anole	Left	0	0	2	0.87	1.11	0.67	0.19	5.18	0.1680	0.1631	0.2143	0.2152	0.1293	0.1312	0.0367	0.0367	Losos & Thorpe 2004; Williams & Rand 1977; Salzburg 1984	*Anolis*	*sagrei*
1964.179	Squamata	Polycrotidae	*Anolis*	*sagrei*	Squamata	Brown anole	Right	0	0	2	0.82	1.12	0.69	0.19	5.18	0.1583		0.2162		0.1332		0.0367		Losos & Thorpe 2004; Williams & Rand 1977; Salzburg 1984	*Anolis*	*sagrei*
Digimorph	Squamata	Agamidae	*Uromastyx*	*hardwickii*	Squamata	Indian spiny-tailed lizard	Left	0	0	3	2.19	3.09	2.08	3.65	14.91	0.1469	0.1271	0.2072	0.2015	0.1395	0.1432	0.2448	0.2190		*Uromastyx*	*hardwickii*
Digimorph	Squamata	Agamidae	*Uromastyx*	*hardwickii*	Squamata	Indian spiny-tailed lizard	Right	0	0	3	1.60	2.92	2.19	2.88	14.91	0.1073		0.1958		0.1469		0.1932			*Uromastyx*	*hardwickii*
Digimorph	Squamata	Trogonophiidae	*Diplometopon*	*zarudnyi*	Squamata	Zarudyi's worm lizard	Left	0	1	3	1.15	1.45	1.09	0.06	4.54	0.2533	0.2346	0.3194	0.3337	0.2401	0.2599	0.0132	0.0705	Gans & Wever 1975; http://www.tigr.org/reptiles/families/Trogonophidae.html	*Diplometopon*	*zarudnyi*
Digimorph	Squamata	Trogonophiidae	*Diplometopon*	*zarudnyi*	Squamata	Zarudyi's worm lizard	Right	0	1	3	0.98	1.58	1.27	0.58	4.54	0.2159		0.3480		0.2797		0.1278		Gans & Wever 1975; http://www.tigr.org/reptiles/families/Trogonophidae.html	*Diplometopon*	*zarudnyi*
1930.5.8.725	Squamata	Colubridae	*Ahaetulla*	*nasuta*	Squamata	Green vine snake	Left	0	0	2	1.03	1.27	1.07	0.49	6.47	0.1592	0.1592	0.1963	0.4096	0.1654	0.1677	0.0757	0.0796	Carpenter 1977; Young 2003	*Ahaetulla*	*nasuta*
1930.5.8.725	Squamata	Colubridae	*Ahaetulla*	*nasuta*	Squamata	Green vine snake	Right	0	0	2	1.03	1.38	1.10	0.54	6.47	0.1592		0.2133		0.1700		0.0835		Carpenter 1977; Young 2003	*Ahaetulla*	*nasuta*
1930.5.8.952	Squamata	Viperidae	*Cerastes*	*cerastes*	Squamata	Horned sand viper	Left	0	0	1	1.56	1.34	1.36	1.85	14.84	0.1051	0.1014	0.0903	0.0984	0.0916	0.0933	0.1247	0.1233	Carpenter 1977; Fenton & Licht 1990; Young 2003; http://www.tigr.org/reptiles/families/Viperidae.html	*Cerastes*	*cerastes*
1930.5.8.952	Squamata	Viperidae	*Cerastes*	*cerastes*	Squamata	Horned sand viper	Right	0	0	1	1.45	1.58	1.41	1.81	14.84	0.0977		0.1065		0.0950		0.1220		Carpenter 1977; Fenton & Licht 1990; Young 2003; http://www.tigr.org/reptiles/families/Viperidae.html	*Cerastes*	*cerastes*
Digimorph	Squamata	Anomochilidae	*Anomolochilus*	*leonardii*	Squamata	Dwarf pipe snake	Left	0	0	3	0.55	0.83	0.66	0.10	4.92	0.1118	0.1351	0.1687	0.1666	0.1341	0.1331	0.0203	0.0183	Carpenter 1977; Young 2003; http://www.tigr.org/reptiles/families/Anomochilidae.html	*Anomolochilus*	*leonardii*
Digimorph	Squamata	Anomochilidae	*Anomolochilus*	*leonardii*	Squamata	Dwarf pipe snake	Right	0	0	3	0.78	0.81	0.65	0.08	4.92	0.1585		0.1646		0.1321		0.0163		Carpenter 1977; Young 2003 http://www.tigr.org/reptiles/families/Anomochilidae.html	*Anomolochilus*	*leonardii*
Digimorph	Squamata	Boidae	*Python*	*morulus*	Squamata	Burmese python	Left	0	0	2	4.67	4.90	5.03	52.96	22.91	0.2038	0.2047	0.2139	0.2230	0.2196	0.2746	2.3117	2.2791	Carpenter 1977; Young 2003; http://www.tigr.org/reptiles/families/Boidae.html	*Python*	*morulus*
Digimorph	Squamata	Boidae	*Python*	*morulus*	Squamata	Burmese python	Right	0	0	2	4.71	5.32	5.80	51.47	22.91	0.2056		0.2322		0.2532		2.2466		Carpenter 1977; Young 2003; http://www.tigr.org/reptiles/families/Boidae.html	*Python*	*morulus*
59.9.21.2	Squamata	Elapidae	*Naja*	*naja*	Squamata	Indian cobra	Left	1	0	2	1.53	2.59	2.00	1.82	20.98	0.0729	0.0755	0.1235	0.1132	0.0953	0.1001	0.0867	0.0972	Gans & Madderson 1973; Carpenter 1977; Young 2003; http://www.tigr.org/reptiles/families/Elapidae.html	*Naja*	*naja*
59.9.21.2	Squamata	Elapidae	*Naja*	*naja*	Squamata	Indian cobra	Right	1	0	2	1.64	2.16	2.20	2.26	20.98	0.0782		0.1030		0.1049		0.1077		Gans & Madderson 1973; Carpenter 1977; Young 2003; http://www.tigr.org/reptiles/families/Elapidae.html	*Naja*	*naja*
S/1969.1.163	Passeriformes	Dicruridae	*Dicrurus*	*paradiseus*	Neognathae	Racket-tailed drongo	Left	3	2	2	4.09	2.25	1.62	4.87	11.22	0.3645	0.3632	0.2005	0.1974	0.1444	0.1390	0.4340	0.4197	Goodale and Kotagama 2006	*Dicrurus*	*paradiseus*
S/1969.1.163	Passeriformes	Dicruridae	*Dicrurus*	*paradiseus*	Neognathae	Racket-tailed drongo	Right	3	2	2	4.06	2.18	1.50	4.55	11.22	0.3619		0.1943		0.1337		0.4055		Goodale and Kotagama 2006	*Dicrurus*	*paradiseus*
S/1979.66.160	Passeriformes	Corvidae	*Corvus*	*corax*	Neognathae	Raven	Left	2	2	1	7.87	3.60	2.41	19.52	24.69	0.3188	0.6266	0.1458	0.1429	0.0976	0.0881	0.7906	0.7778	Snow 1998; Enggist-Dueblin & Pfister 2002	*Corvus*	*corax*
S/1979.66.160	Passeriformes	Corvidae	*Corvus*	*corax*	Neognathae	Raven	Right	2	2	1	7.60	3.46	1.94	18.89	24.69	0.3078		0.1401		0.0786		0.7651		Snow 1998; Enggist-Dueblin & Pfister 2003	*Corvus*	*corax*
S/1968.4.14	Passeriformes	Muscicapidae	*Luscinia*	*megarhynchos*	Neognathae	Nightingale	Left	3	0	2	3.64	1.64	1.16	2.21	8.11	0.4488	0.4691	0.2022	0.1028	0.1430	0.1381	0.2725	0.2731	Snow 1998; Thomas 2002	*Luscinia*	*megarhynchos*
S/1968.4.14	Passeriformes	Muscicapidae	*Luscinia*	*megarhynchos*	Neognathae	Nightingale	Right	3	0	2	3.97	1.49	1.08	2.22	8.11	0.4895		0.1837		0.1332		0.2737		Snow 1998; Thomas 2002	*Luscinia*	*megarhynchos*
S/2002.46.1	Passeriformes	Estrildidae	*Taeniopygia*	*guttata*	Neognathae	Zebra finch	Left	3	2	1	3.29	1.52	0.99	1.57	6.14	0.5358	0.5504	0.2476	0.2451	0.1612	0.1579	0.2557	0.2557	Snow 1998; Cynx & Gell 2004;	*Taeniopygia*	*guttata*
S/2002.46.1	Passeriformes	Estrildidae	*Taeniopygia*	*guttata*	Neognathae	Zebra finch	Right	3	2	1	3.47	1.49	0.95	1.57	6.14	0.5651		0.2427		0.1547		0.2557		Snow 1998; Cynx & Gell 2004;	*Taeniopygia*	*guttata*
Palaeo (6)9	Passeriformes	Regulidae	*Regulus*	*regulus*	Neognathae	Goldcrest	Left	3	2	2	2.92	0.88	1.03	1.10	3.45	0.8464	0.8391	0.2550	0.2535	0.2986	0.2928	0.3188	0.3159	Hogstad 1984; Snow 1998;	*Regulus*	*regulus*
Palaeo (6)9	Passeriformes	Regulidae	*Regulus*	*regulus*	Neognathae	Goldcrest	Right	3	2	2	2.87	0.87	0.99	1.08	3.45	0.8319		0.2521		0.2870		0.3130		Hogstad 1984; Snow 1998;	*Regulus*	*regulus*
S/1973.66.109	Psittaciformes	Psittacidae	*Psittacus*	*erithacus*	Neognathae	Grey parrot	Left	3	2	2	5.61	2.85	2.07	10.44	28.12	0.1995	0.2029	0.1014	0.0989	0.0736	0.0679	0.3713	0.3663		*Psittacus*	*erithacus*
S/1973.66.109	Psittaciformes	Psittacidae	*Psittacus*	*erithacus*	Neognathae	Grey parrot	Right	3	2	2	5.80	2.71	1.75	10.16	28.12	0.2063		0.0964		0.0622		0.3613			*Psittacus*	*erithacus*
S/1966.51.59	Psittaciformes	Psittacidae	*Melopsittacus*	*undulatus*	Neognathae	Budgerigar	Left	3	2	1	3.21	1.02	1.03	1.74	10.44	0.3075	0.3094	0.0977	0.1020	0.0987	0.1049	0.1667	0.1667	Hile et al. 2000; Streidter et al. 2003;	*Melopsittacus*	*undulatus*
S/1966.51.59	Psittaciformes	Psittacidae	*Melopsittacus*	*undulatus*	Neognathae	Budgerigar	Right	3	2	1	3.25	1.11	1.16	1.74	10.44	0.3113		0.1063		0.1111		0.1667		Hile et al. 2000; Streidter et al. 2003;	*Melopsittacus*	*undulatus*
S/1986.75.13	Strigiformes	Strigidae	*Speleotyto*	*cunicularia*	Neognathae	Burrowing owl	Left	2	1 (2 reported)	1	6.84	2.71	1.67	12.29	11.57	0.5912	0.5964	0.2342	0.2307	0.1443	0.1386	1.0622	1.0523	Snow 1998;	*Speleotyto*	*cunicularia*
S/1986.75.13	Strigiformes	Strigidae	*Speleotyto*	*cunicularia*	Neognathae	Burrowing owl	Right	2	1 (2 reported)	1	6.96	2.63	1.57	12.06	11.57	0.6016		0.2273		0.1357		1.0424		Snow 1998;	*Speleotyto*	*cunicularia*
S/1981.39.1	Strigiformes	Tytonidae	*Tyto*	*alba*	Neognathae	Barn owl	Left	2	1 (often 2 for nesting/roosting)	1	13.25	2.99	1.98	37.64	14.89	0.8899	0.8929	0.2008	0.2025	0.1330	0.1303	2.5279	2.5269	Snow 1998;	*Tyto*	*alba*
S/1981.39.1	Strigiformes	Tytonidae	*Tyto*	*alba*	Neognathae	Barn owl	Right	2	1 (often 2 for nesting/roosting)	1	13.34	3.04	1.90	37.61	14.89	0.8959		0.2042		0.1276		2.5259		Snow 1998;	*Tyto*	*alba*
S/2007.139.12	Falconiformes	Accipitridae	*Buteo*	*buteo*	Neognathae	Buzzard	Left	2	1 (2 in courtship)	1	6.20	3.05	2.41	22.52	17.93	0.3458	0.3486	0.1701	0.1793	0.1344	0.1324	1.2560	1.2420	Snow 1998;	*Buteo*	*buteo*
S/2007.139.12	Falconiformes	Accipitridae	*Buteo*	*buteo*	Neognathae	Buzzard	Right	2	1 (2 in courtship)	1	6.30	3.38	2.34	22.02	17.93	0.3514		0.1885		0.1305		1.2281		Snow 1998;	*Buteo*	*buteo*
Nina Triche	Sphenisciformes	Spheniscidae	*Spheniscus*	*demersus*	Neognathae	African jackass penguin	Left	2	2	0	5.38	3.13	2.12	19.56	24.23	0.2220	0.2463	0.1292	0.1251	0.0875	0.0891	0.8073	0.8019	Clarke et al 2006	*Spheniscus*	*demersus*
Nina Triche	Sphenisciformes	Spheniscidae	*Spheniscus*	*demersus*	Neognathae	African jackass penguin	Right	2	2	0	6.56	2.91	2.20	19.30	24.23	0.2707		0.1201		0.0908		0.7965		Clarke et al 2006	*Spheniscus*	*demersus*
S/1987.27.1	Anseriformes	Anatidae	*Aythya*	*fuligula*	Neognathae	Tufted duck	Left	2	2	0	3.73	2.65	1.42	6.76	15.29	0.2440	0.3064	0.1733	0.1739	0.0929	0.0896	0.4421	0.4551	Snow 1998;	*Aythya*	*fuligula*
S/1987.27.1	Anseriformes	Anatidae	*Aythya*	*fuligula*	Neognathae	Tufted duck	Right	2	2	0	5.64	2.67	1.32	7.16	15.29	0.3689		0.1746		0.0863		0.4683		Snow 1998;	*Aythya*	*fuligula*
S/1995.11.1	Anseriformes	Anatidae	*Cygnus*	*olor*	Neognathae	Mute swan	Left	0	2	0	8.08	3.74	3.13	30.19	32.53	0.2484	0.2434	0.1150	0.1111	0.0962	0.0934	0.9281	0.9431	Snow 1998;	*Cygnus*	*olor*
S/1995.11.1	Anseriformes	Anatidae	*Cygnus*	*olor*	Neognathae	Mute swan	Right	0	2	0	7.76	3.49	2.95	31.17	32.53	0.2385		0.1073		0.0907		0.9582		Snow 1998;	*Cygnus*	*olor*
1859.9.6.393	Ciconiiformes	Ciconidae	*Ciconia*	*ciconia*	Neognathae	White stork	Left	0	2	1	7.11	2.99	2.29	22.62	27.25	0.2609	0.2688	0.1097	0.1095	0.0840	0.0787	0.8301	0.8352	Snow 1998;	*Ciconia*	*ciconia*
1859.9.6.393	Ciconiiformes	Ciconidae	*Ciconia*	*ciconia*	Neognathae	White stork	Right	0	2	1	7.54	2.98	2.00	22.90	27.25	0.2767		0.1094		0.0734		0.8404		Snow 1998;	*Ciconia*	*ciconia*
S/1952.1.103	Ciconiiformes	Ciconidae	*Ciconia*	*nigra*	Neognathae	Black stork	Left	2	0 (3 for migration)	2	6.49	3.01	2.16	9.36	26.93	0.2410	0.2328	0.1118	0.1131	0.0802	0.4453	0.3476	0.5290	Snow 1998;	*Ciconia*	*nigra*
S/1952.1.103	Ciconiiformes	Ciconidae	*Ciconia*	*nigra*	Neognathae	Black stork	Right	2	0 (3 for migration)	2	6.05	3.08	2.39	19.13	26.93	0.2247		0.1144		0.0887		0.7104		Snow 1998;	*Ciconia*	*nigra*
1927.2.5.1	Struthioniformes	Struthionidae	*Struthio*	*camelus*	Palaeognathae	Ostrich	Left	1	2	1	7.12	3.90	2.64	29.77	26.12	0.2726	0.2643	0.1493	0.1439	0.1011	0.1009	1.1397	1.1809		*Struthio*	*camelus*
1927.2.5.1	Struthioniformes	Struthionidae	*Struthio*	*camelus*	Palaeognathae	Ostrich	Right	1	2	1	6.69	3.62	2.63	31.92	26.12	0.2561		0.1386		0.1007		1.2221			*Struthio*	*camelus*
1939.12.9.964	Struthioniformes	Casuariidae	*Casuarius*	*casuarius*	Palaeognathae	Cassowary	Left	1	0	2	8.27	4.56	3.19	41.93	19.77	0.4183	0.4302	0.2307	0.2271	0.1614	0.1581	2.1209	2.2314	Mack & Jones 2003	*Casuarius*	*casuarius*
1939.12.9.964	Struthioniformes	Casuariidae	*Casuarius*	*casuarius*	Palaeognathae	Cassowary	Right	1	0	2	8.74	4.42	3.06	46.30	19.77	0.4421		0.2236		0.1548		2.3419		Mack & Jones 2003	*Casuarius*	*casuarius*
S/2001.50.1	Struthioniformes	Casuariidae	*Dromaius*	*novaehollandiae*	Palaeognathae	Emu	Left	1	1	2	8.32	4.56	3.35	29.22	31.78	0.2618	0.2563	0.1435	0.1353	0.1054	0.1055	0.9194	0.9211		*Dromaius*	*novaehollandiae*
S/2001.50.1	Struthioniformes	Casuariidae	*Dromaius*	*novaehollandiae*	Palaeognathae	Emu	Right	1	1	2	7.97	4.04	3.36	29.33	31.78	0.2508		0.1271		0.1057		0.9229			*Dromaius*	*novaehollandiae*
S/1972.1.21	Struthioniformes	Apterygidae	*Apteryx*	*hastelquistii*	Palaeognathae	Kiwi	Left	2	1	1	5.15	3.82	2.45	14.03	18.35	0.2807	0.2828	0.2082	0.2125	0.1335	0.1316	0.7646	0.7695	Taborsky and Taborsky 1999;	*Apteryx*	*hastelquistii*
S/1972.1.21	Struthioniformes	Apterygidae	*Apteryx*	*hastelquistii*	Palaeognathae	Kiwi	Right	2	1	1	5.23	3.98	2.38	14.21	18.35	0.2850		0.2169		0.1297		0.7744		Taborsky and Taborsky 1999;	*Apteryx*	*hastelquistii*

Coding

Aggregation:		*Habitat:*		*Vocal complexity:*	
Solitary	0	Aquatic (marine/fluvial)	0	None/hissing	0
Groups < 20	1	Terrestrial open (savannah/montane/desert)	1	Single phrase	1
Groups >20	2	Terrestrial closed (jungle/forest/cave)	2	Multiphrase	2
		Fossorial	3	Multiphrase (complex)	3

Mean values

Genus	Species	Length	RC Width	ML Width	Volume	Log Length	Log RCWidth	Log MLWidth	Log Volume
Alligator	*mississipiensis*	0.1821	0.1785	0.1386	0.7782	-0.73969005	-0.74836178	-0.85823677	-0.10890877
Caiman	*crocodylus*	0.2366	0.1917	0.1361	0.7063	-0.62598526	-0.71737789	-0.86614187	-0.15101079
Crocodylus	*intermedius*	0.1147	0.0713	0.3616	0.0072	-0.94043658	-1.1469105	-0.44177158	-2.1426675
Crocodylus	*acutus*	0.0992	0.0752	0.0465	0.0139	-1.0034883	-1.1237822	-1.332547	-1.8569852
Crocodylus	*johnstoni*	0.1856	0.0659	0.0958	0.0089	-0.73142203	-1.1811146	-1.0186345	-2.05061
Crocodylus	*moreleti*	0.1560	0.1194	0.0796	1.4184	-0.8068754	-0.92299567	-1.0990869	0.15179872
Tomistoma	*schlegelii*	0.1841	0.0891	0.0573	0.0261	-0.73494621	-1.0501223	-1.2418454	-1.5833595
Gavialis	*gangeticus*	0.1494	0.1308	0.0814	0.7409	-0.8256494	-0.88339226	-1.0893756	-0.13024041
Chelonia	*mydas*	0.0841	0.0941	0.0653	1.4266	-1.075204	-1.0264104	-1.1850868	0.15430222
Chelydra	*serpenta*	0.0910	0.1449	0.1326	1.9475	-1.0409586	-0.83893161	-0.87745648	0.28947747
Sphenodon	*punctatus*	0.1964	0.2310	0.1545	1.4062	-0.70685852	-0.63638802	-0.81107152	0.14804709
Gekko	*gecko*	0.2210	0.3112	0.2221	0.4092	-0.65560773	-0.50696041	-0.65345144	-0.38806437
Ptyodactylus	*hasselquistii*	0.2040	0.2395	0.1766	0.1032	-0.69036983	-0.62069448	-0.7530093	-0.9863203
Gymnodactylus	*geckoides*	0.2879	0.3158	0.1562	0.0904	-0.54075834	-0.50058787	-0.80631897	-1.0438316
Hemitheconyx	*caudicinctus*	0.2054	0.3356	0.2084	0.3407	-0.68739956	-0.47417805	-0.68110229	-0.46762787
Nephrurus	*levis*	0.1799	0.2791	0.1792	0.1376	-0.74496884	-0.55424016	-0.74666199	-0.86138157
Gerrhonotus	*coeruleus*	0.1355	0.2114	0.1334	0.0677	-0.8680607	-0.67489502	-0.87484417	-1.1694113
Gerrhonotus	*infernalis*	0.1517	0.2567	0.1372	0.1286	-0.81901442	-0.59057413	-0.86264589	-0.89075903
Podarcis	*sicula*	0.1834	0.2628	0.1805	0.0794	-0.73660067	-0.58037464	-0.74352279	-1.1001795
Tribolonotus	*gracilis*	0.2007	0.2700	0.1792	0.2350	-0.69745263	-0.56863624	-0.74666199	-0.62893214
Tiliqua	*rugosa*	0.1469	0.2565	0.1778	0.5454	-0.8329782	-0.59091263	-0.75006824	-0.26328487
Chalcides	*occelatus*	0.1912	0.2189	0.1467	0.0890	-0.71851211	-0.65975424	-0.83356989	-1.05061
Eumeces	*schneideri*	0.1750	0.1977	0.1326	0.1336	-0.75696195	-0.70399333	-0.87745648	-0.87419354
Cricosaura	*typica*	0.2009	0.2477	0.1386	0.0280	-0.69702006	-0.60607399	-0.85823677	-1.552842
Varanus	*exanthematicus*	0.1401	0.1821	0.1185	0.2388	-0.85356186	-0.73969005	-0.92628165	-0.62196568
Varanus	*niloticus*	0.0869	0.0937	0.0688	0.2473	-1.0609802	-1.0282604	-1.1624116	-0.60677588
Varanus	*giganteus*	0.0950	0.1064	0.0800	0.1685	-1.0222764	-0.97305837	-1.09691	-0.77340009
Heloderma	*suspectum*	0.1108	0.1619	0.1255	0.2302	-0.95546024	-0.79075315	-0.90135627	-0.63789468
Lanthanotus	*borneensis*	0.1347	0.2837	0.1725	0.1341	-0.8706324	-0.54714066	-0.7632109	-0.87257122
Gambelia	*wislizenii*	0.1605	0.2494	0.1624	0.1304	-0.79452496	-0.60310355	-0.78941398	-0.88472241
Liolaemis	*chilensis*	0.1885	0.1960	0.1721	0.6401	-0.72468865	-0.70774393	-0.76421913	-0.19375217
Anolis	*grahami*	0.0823	0.1093	0.0795	0.0265	-1.0846002	-0.96137984	-1.0996329	-1.5767541
Anolis	*sagrei*	0.1631	0.2152	0.1312	0.0367	-0.78754604	-0.66715773	-0.88206616	-1.4353339
Uromastyx	*hardwickii*	0.1271	0.2015	0.1432	0.2190	-0.89585445	-0.69572495	-0.84405698	-0.65955589
Diplometopon	*zarudnyi*	0.2346	0.3337	0.2599	0.0705	-0.62967199	-0.47664379	-0.58519372	-1.1518109
Ahaetulla	*nasuta*	0.1592	0.4096	0.1677	0.0796	-0.79805694	-0.38764005	-0.77546694	-1.0990869
Cerastes	*cerastes*	0.1014	0.0984	0.0933	0.1233	-0.99396205	-1.0070049	-1.0301184	-0.90903692
Anomolochilus	*leonardii*	0.1351	0.1666	0.1331	0.0183	-0.86934465	-0.778325	-0.87582194	-1.7375489
Python	*morulus*	0.2047	0.2230	0.2746	2.2791	-0.68888216	-0.65169514	-0.56129947	0.35776338
Naja	*naja*	0.0755	0.1132	0.1001	0.0972	-1.122053	-0.94615357	-0.99956592	-1.0123337
Dicrurus	*paradiseus*	0.3632	0.1974	0.1390	0.4197	-0.43985416	-0.70465285	-0.8569852	-0.37706103
Corvus	*corax*	0.6266	0.1429	0.0881	0.7778	-0.20300961	-0.84496777	-1.0550241	-0.10913206
Luscinia	*megarhynchos*	0.4691	0.1028	0.1381	0.2731	-0.32873457	-0.98800689	-0.85980632	-0.5636783
Taeniopygia	*guttata*	0.5504	0.2451	0.1579	0.2557	-0.25932157	-0.61065669	-0.80161787	-0.59226927
Regulus	*regulus*	0.8391	0.2535	0.2928	0.3159	-0.076186279	-0.59602204	-0.53342893	-0.50045037
Psittacus	*erithacus*	0.2029	0.0989	0.0679	0.3663	-0.69271795	-1.0048037	-1.1681302	-0.43616308
Melopsittacus	*undulatus*	0.3094	0.1020	0.1049	0.1667	-0.50947969	-0.99139983	-0.97922451	-0.7780644
Speleotyto	*cunicularia*	0.5964	0.2307	0.1386	1.0523	-0.22446237	-0.63695241	-0.85823677	0.02213957
Tyto	*alba*	0.8929	0.2025	0.1303	2.5269	-0.049197177	-0.69357497	-0.88505558	0.40258806
Buteo	*buteo*	0.3486	0.1793	0.1324	1.2420	-0.45767262	-0.74641971	-0.87811201	0.094121596
Spheniscus	*demersus*	0.2463	0.1251	0.0891	0.8019	-0.60853559	-0.90274269	-1.0501223	-0.095879787
Aythya	*fuligula*	0.3064	0.1739	0.0896	0.4551	-0.51371124	-0.75970042	-1.047692	-0.34189316
Cygnus	*olor*	0.2434	0.1111	0.0934	0.9431	-0.61367943	-0.95428594	-1.0296531	-0.025442255
Ciconia	*ciconia*	0.2688	0.1095	0.0787	0.8352	-0.57057074	-0.96058588	-1.1040253	-0.078209514
Ciconia	*nigra*	0.2328	0.1131	0.4453	0.5290	-0.63301702	-0.9465374	-0.3513473	-0.27654433
Struthio	*camelus*	0.2643	0.1439	0.1009	1.1809	-0.57790284	-0.84193921	-0.99610883	0.072213123
Casuarius	*casuarius*	0.4302	0.2271	0.1581	2.2314	-0.36632959	-0.64378287	-0.80106813	0.34857743
Dromaius	*novaehollandiae*	0.2563	0.1353	0.1055	0.9211	-0.59125139	-0.8687022	-0.97674754	-0.035693218
Apteryx	*hastelquistii*	0.2828	0.2125	0.1316	0.7695	-0.54852059	-0.67264107	-0.88074411	-0.11379138