

SUPPORTING INFORMATION

Bone histology of the Late Pleistocene *Prolagus sardus* (Lagomorpha: Mammalia) provides further insights into life history of insular giant small mammals

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INDEX

Appendix S1.....	page 2
Table S1.....	page 26
Table S2.....	page 28

CAPTIONS

Appendix S1. Descriptive and inferential statistical results of the *P. sardus* and *Ochotona* species assessed in the study.

Table S1. Material of *Prolagus sardus* (N=15), *Ochotona collaris* (N=5), *Ochotona dauurica* (N=5) and *Ochotona princeps* (N=3) used in the present study. For each individual, it is included the growth plate status, as well as measurements (in mm) of the femur. Specimens whose bone tissue have been damaged by microorganisms are underlined. Abbreviations: Laterality (L=left, R=right), Growth plate status (B=broken, F=fused, NF=not fused, SL=fused with suture lines), Age category (A=adult, J=juvenile, Y=young adult) and Measurements [BM=body mass (in g), DAPm=anteroposterior diameter at the midshaft, DTm=transversal diameter at the midshaft, FAPDd=distal anteroposterior diameter of the femur, FLmax=maximum length of the femur (including or not the epiphyses), FTDD=distal transversal diameter of the femur, FTDP=proximal transversal diameter of the femur]. In the case of fossil species, the BM is the mean of the weights estimated using FAPDd, FTDD, FTDP (see the text); whereas in extant species, BM data come from the specimens' tags and museum records.

Table S2. Raw data of the cortex geometry (CA, MA, TA, CA/MA and CA/TA) and specimen's size (DAPm, DTm and BM) of *P. sardus*, *Oc. dauurica*, *Oc. collaris* and *Oc. princeps*. Abbreviations: Geometry data [CA=cortical area (in mm²); MA=medullary area (in mm²); and TA=total area (in mm²)] and Size data [DAPm=anteroposterior diameter at the midshaft (in mm), DTm=transversal diameter at the midshaft (in mm); and BM=body mass (in g)].

APPENDIX S1. STATISTICAL RESULTS

1) DESCRIPTIVE ANALYSIS

- *P. sardus* considering ontogenetic categories.

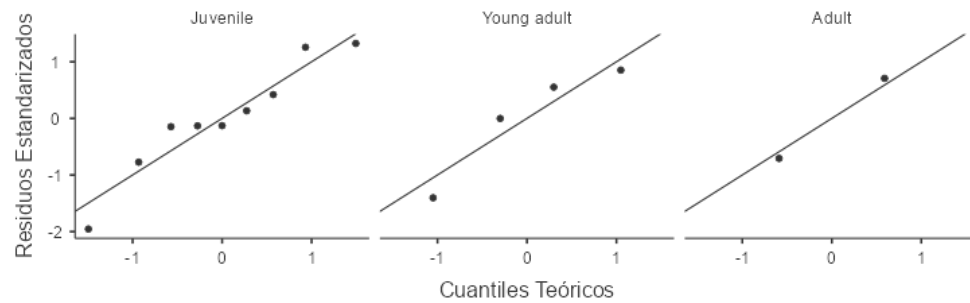
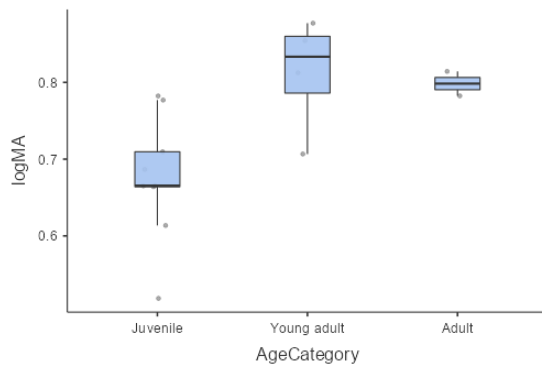
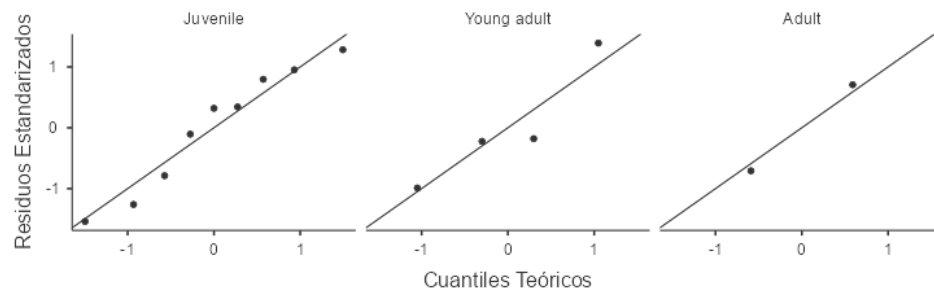
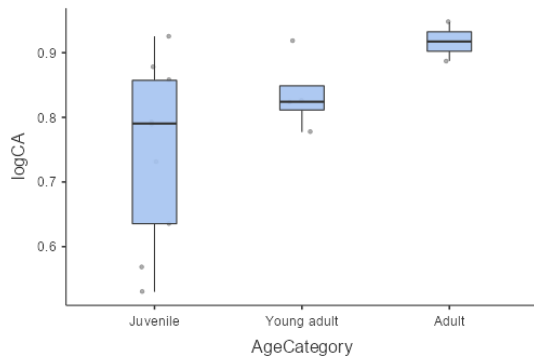
Continuous variables (logCA, logMA, logTA, logCA/MA, logCA/TA, log DAPm, logDTm) and grouping variable (age category: Juvenile, Young adult and Adult).

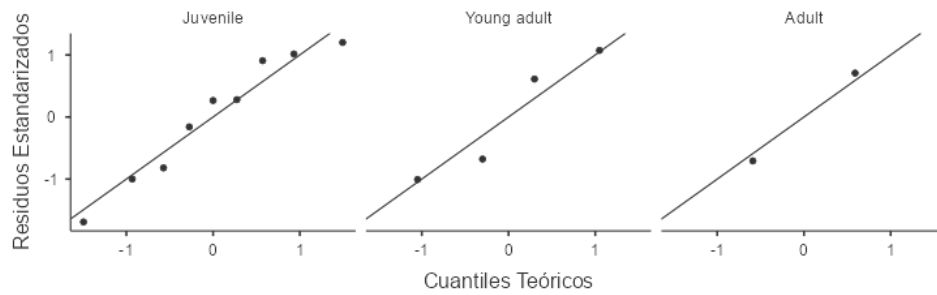
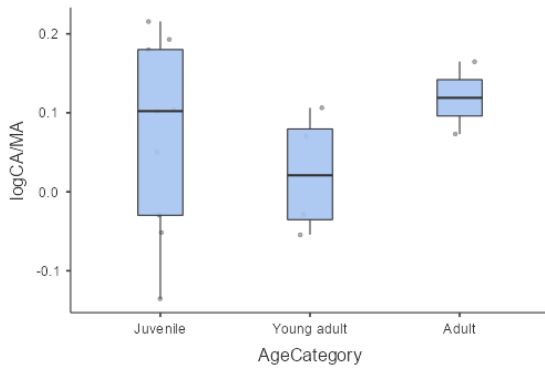
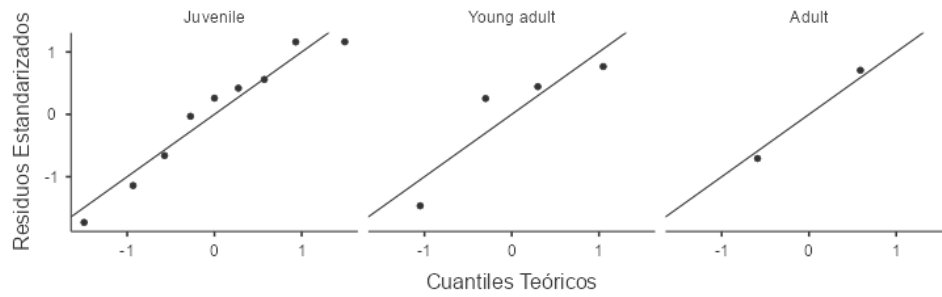
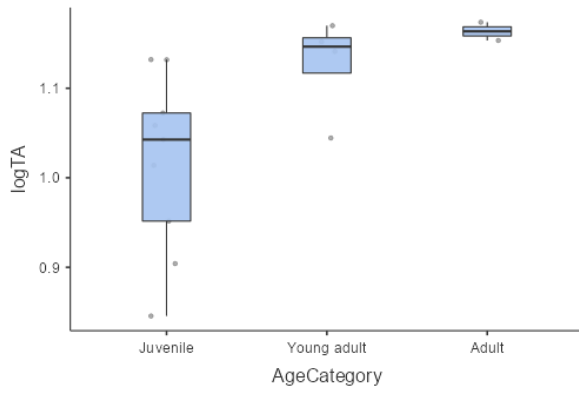
	AgeCategory	logCA	logMA	logTA	logCA/MA	logCA/TA	logDAPm	logDTm
N	Juvenile	9	9	9	9	9	9	9
	Young adult	4	4	4	4	4	4	4
	Adult	2	2	2	2	2	2	2
Lost	Juvenile	0	0	0	0	0	0	0
	Young adult	0	0	0	0	0	0	0
	Adult	0	0	0	0	0	0	0
Mean	Juvenile	0.746	0.676	1.02	0.0699	-0.271	0.531	0.627
	Young adult	0.836	0.813	1.13	0.0234	-0.291	0.586	0.679
	Adult	0.917	0.798	1.16	0.119	-0.246	0.607	0.716
Median	Juvenile	0.790	0.665	1.04	0.102	-0.253	0.531	0.638
	Young adult	0.824	0.833	1.15	0.0209	-0.291	0.597	0.679
	Adult	0.917	0.798	1.16	0.119	-0.246	0.607	0.716
Standard deviation	Juvenile	0.140	0.0804	0.0989	0.121	0.0575	0.0589	0.0589
	Young adult	0.0594	0.0756	0.0562	0.0772	0.0375	0.0332	0.0212
	Adult	0.0425	0.0225	0.0144	0.0650	0.0281	0.0226	0.00566
Min	Juvenile	0.530	0.519	0.846	-0.135	-0.374	0.447	0.512
	Young adult	0.777	0.707	1.04	-0.0543	-0.329	0.538	0.658
	Adult	0.887	0.782	1.15	0.0730	-0.266	0.591	0.712
Maz	Juvenile	0.925	0.782	1.13	0.216	-0.206	0.613	0.695
	Young adult	0.919	0.877	1.17	0.106	-0.251	0.613	0.699
	Adult	0.947	0.814	1.17	0.165	-0.226	0.623	0.720
W Shapiro-Wilk	Juvenile	0.936	0.929	0.936	0.938	0.926	0.938	0.930
	Young adult	0.901	0.899	0.818	0.901	0.900	0.860	0.830
	Adult	NaN	NaN	NaN	NaN	NaN	NaN	NaN
P-value Shapiro-Wilk	Juvenile	0.538	0.469	0.538	0.563	0.445	0.563	0.478
	Young adult	0.438	0.427	0.138	0.437	0.434	0.259	0.167
	Adult	NaN *	NaN *	NaN *	NaN *	NaN *	NaN *	NaN *

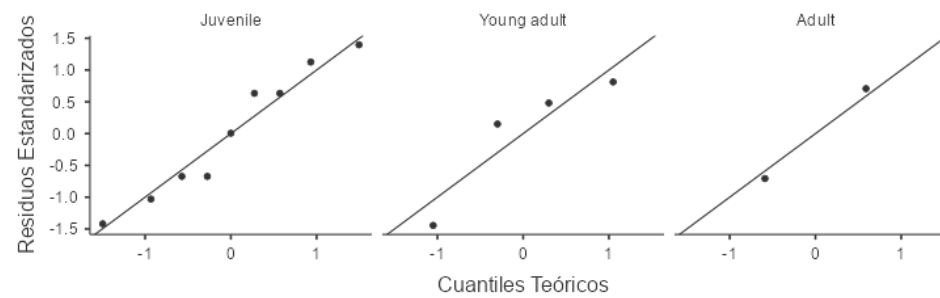
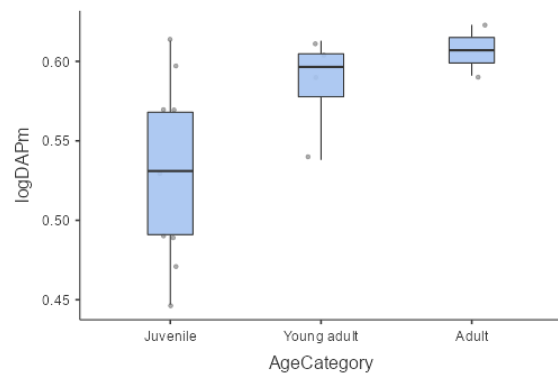
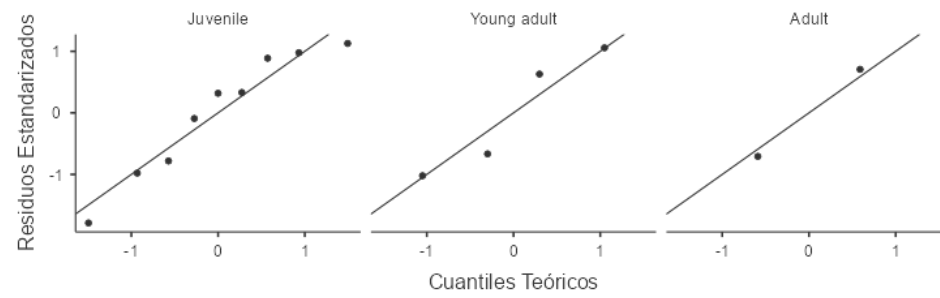
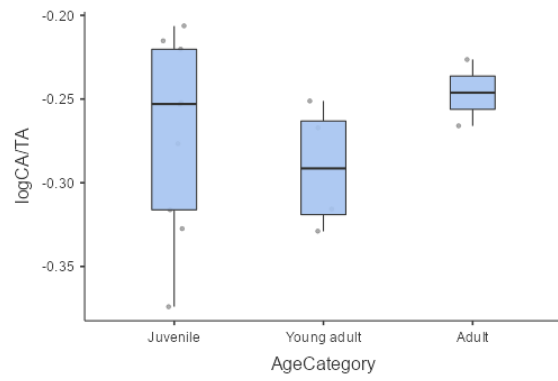
Levene's test (considering ontogenetic categories of *P. sardus*)

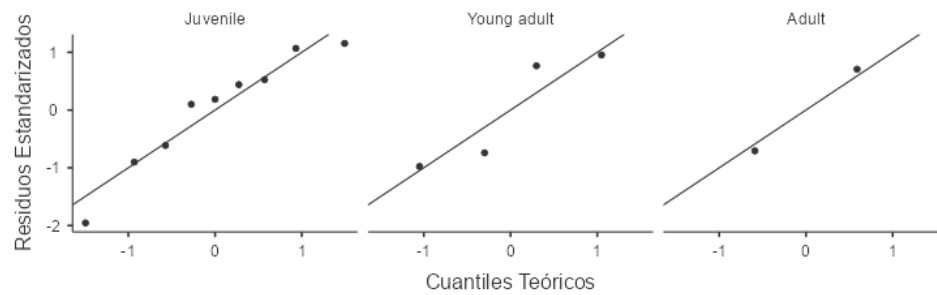
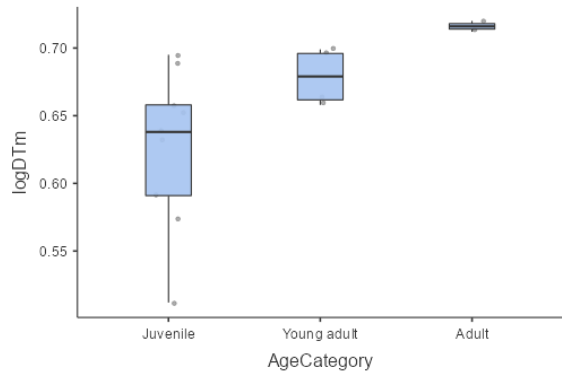
	F	gl1	gl2	p
logCA	3.124	2	12	0.081
logMA	0.550	2	12	0.591
logTA	2.192	2	12	0.154
logCA/MA	1.240	2	12	0.324
logCA/TA	1.218	2	12	0.330
logDAPm	2.724	2	12	0.106
logDTm	2.572	2	12	0.118

Graphics









- Ochotona considering species (only adults).

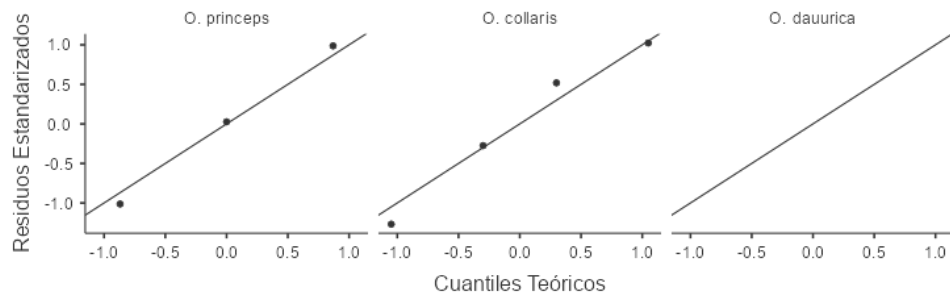
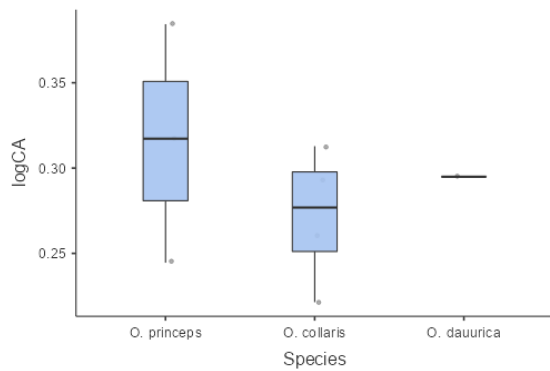
Continuous variables (logCA, logMA, logTA, logCA/MA, logCA/TA, log DAPm, logDTm) and grouping variable (species: *Oc. princeps*, *Oc. collaris*, and *Oc. dauurica*).

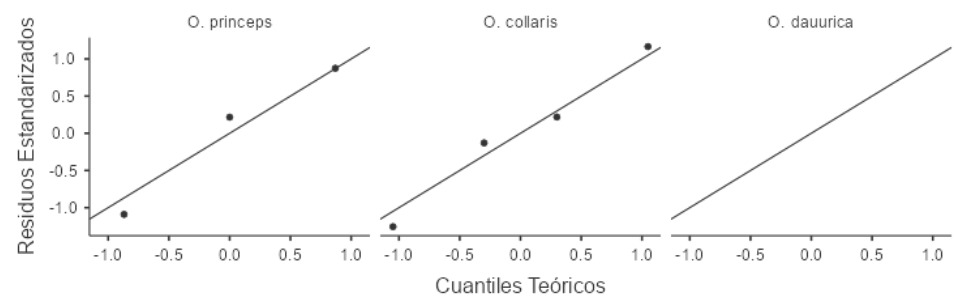
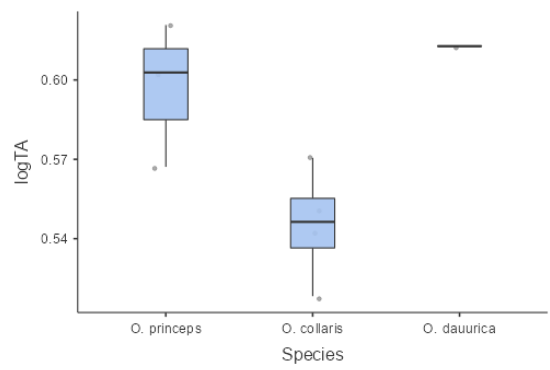
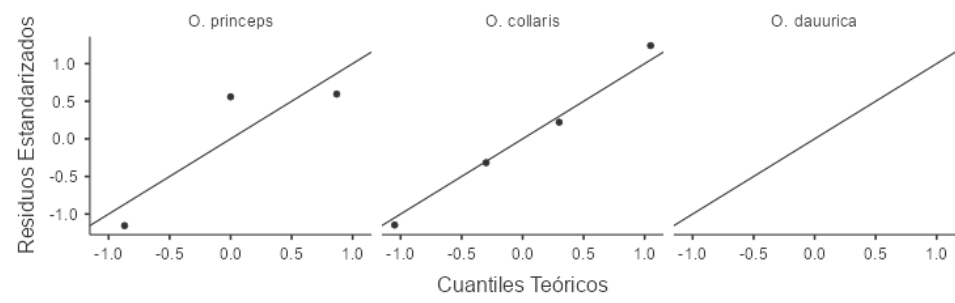
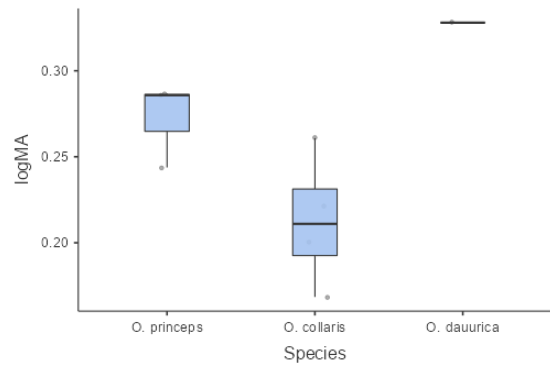
	Species	logCA	logMA	logTA	logCA/MA	logCA/TA	logDAPm	logDTm
N	<i>Oc. princeps</i>	3	3	3	3	3	3	3
	<i>Oc. collaris</i>	4	4	4	4	4	4	4
	<i>Oc. dauurica</i>	1	1	1	1	1	1	1
Lost	<i>Oc. princeps</i>	0	0	0	0	0	0	0
	<i>Oc. collaris</i>	0	0	0	0	0	0	0
	<i>Oc. dauurica</i>	0	0	0	0	0	0	0
Mean	<i>Oc. princeps</i>	0.315	0.272	0.597	0.0433	-0.282	0.311	0.407
	<i>Oc. collaris</i>	0.272	0.213	0.545	0.0592	-0.273	0.312	0.378
	<i>Oc. dauurica</i>	0.295	0.328	0.613	-0.0331	-0.318	0.297	0.428
Median	<i>Oc. princeps</i>	0.317	0.286	0.603	0.0314	-0.286	0.310	0.398
	<i>Oc. collaris</i>	0.277	0.211	0.546	0.0918	-0.258	0.312	0.371
	<i>Oc. dauurica</i>	0.295	0.328	0.613	-0.0331	-0.318	0.297	0.428
Standard deviation	<i>Oc. princeps</i>	0.0699	0.0245	0.0273	0.0919	0.0432	0.0125	0.0232
	<i>Oc. collaris</i>	0.0399	0.0387	0.0216	0.0657	0.0319	0.00403	0.0159
	<i>Oc. dauurica</i>	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Min	<i>Oc. princeps</i>	0.245	0.244	0.567	-0.0422	-0.323	0.299	0.389
	<i>Oc. collaris</i>	0.221	0.169	0.518	-0.0394	-0.321	0.307	0.367
	<i>Oc. dauurica</i>	0.295	0.328	0.613	-0.0331	-0.318	0.297	0.428
Max	<i>Oc. princeps</i>	0.384	0.287	0.621	0.141	-0.236	0.324	0.433
	<i>Oc. collaris</i>	0.313	0.261	0.571	0.0925	-0.257	0.316	0.401

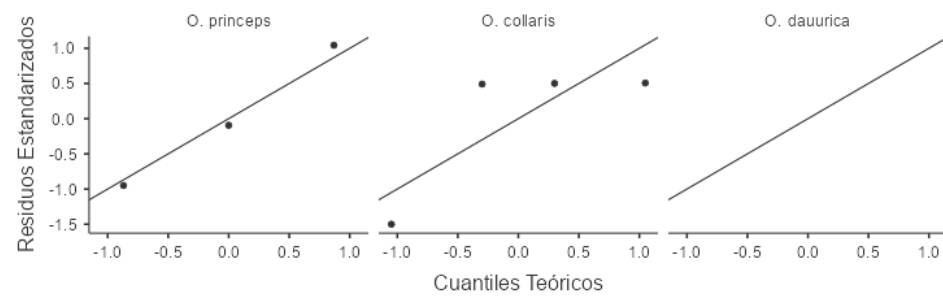
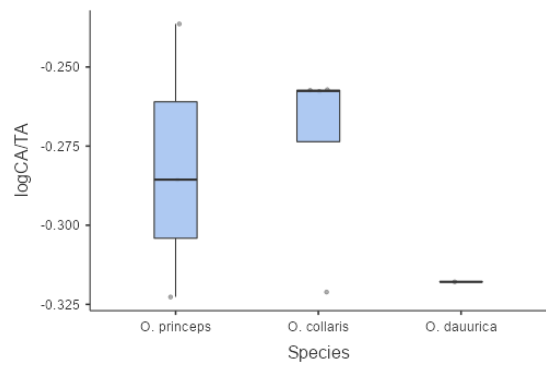
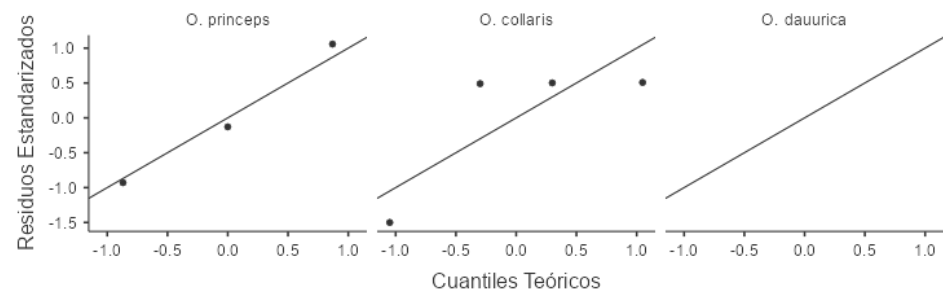
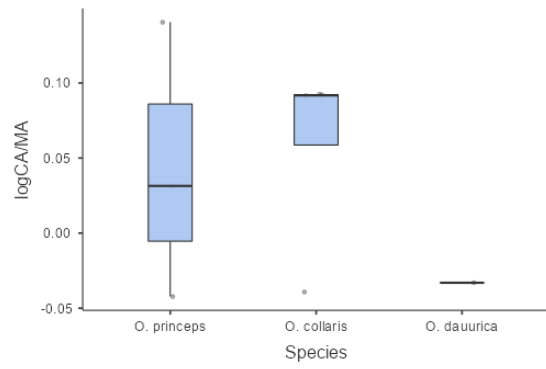
	<i>Oc. dauurica</i>	0.295	0.328	0.613	-0.0331	-0.318	0.297	0.428
W Shapiro-Wilk	<i>Oc. princeps</i>	0.999	0.766	0.965	0.988	0.993	0.995	0.896
	<i>Oc. collaris</i>	0.971	0.997	0.988	0.636	0.636	0.963	0.765
	<i>Oc. dauurica</i>	NaN	NaN	NaN	NaN	NaN	NaN	NaN
P-value Shapiro-Wilk	<i>Oc. princeps</i>	0.956	0.035	0.640	0.787	0.845	0.868	0.372
	<i>Oc. collaris</i>	0.848	0.989	0.949	0.002 *	0.002 *	0.796	0.053
	<i>Oc. dauurica</i>	NaN	NaN	NaN	NaN	NaN	NaN	NaN

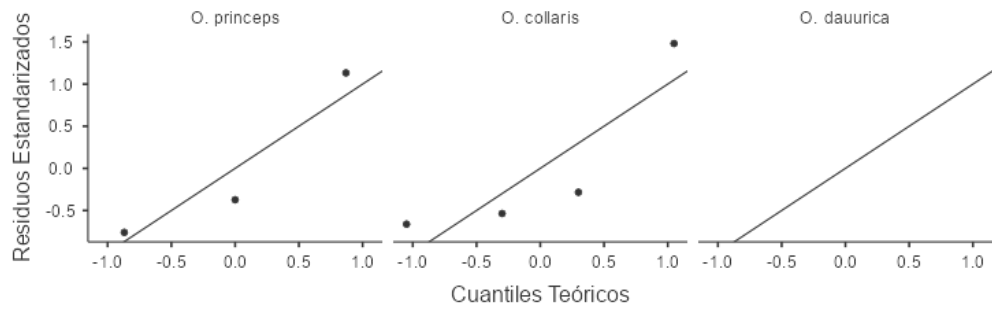
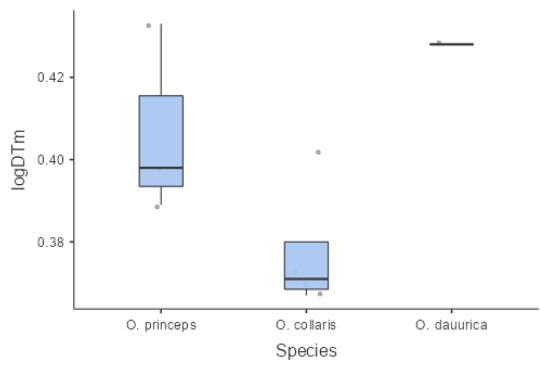
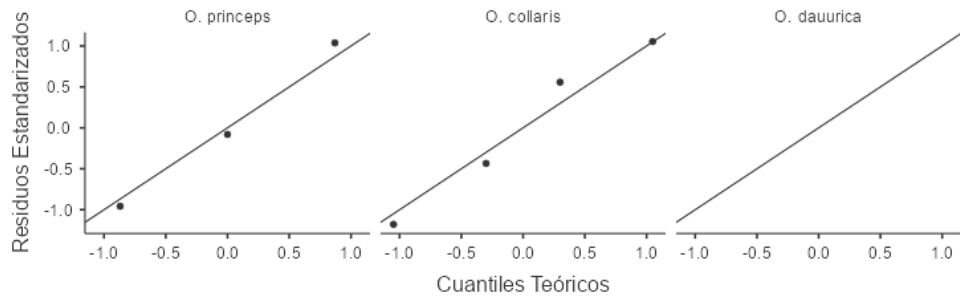
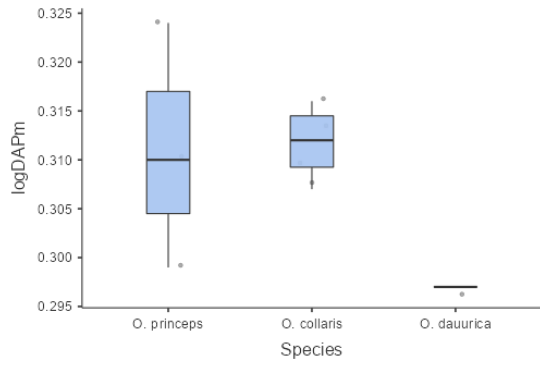
Levene's test (excluding <i>Oc. dauurica</i> because N=1)				
	F	gl1	gl2	p
logCA	0.570	1	5	0.484
logMA	0.533	1	5	0.498
logTA	0.252	1	5	0.637
logCA/MA	0.277	1	5	0.621
logCA/TA	0.184	1	5	0.686
logDAPm	2.643	1	5	0.165
logDTm	0.805	1	5	0.411

Graphics





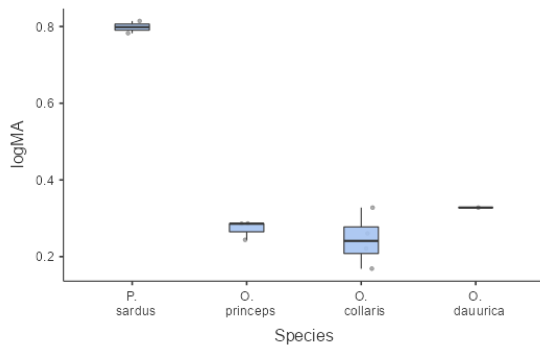
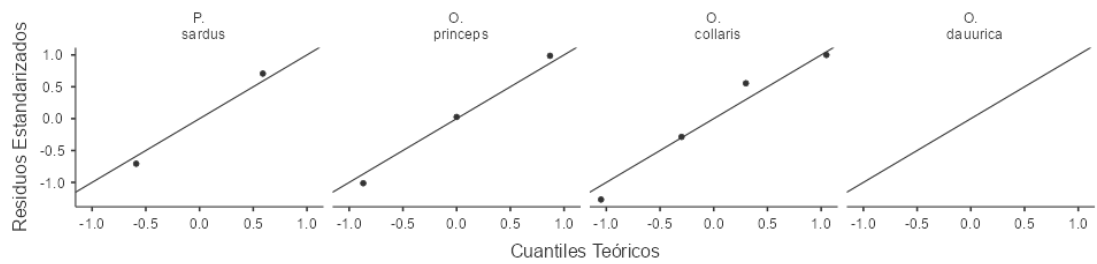
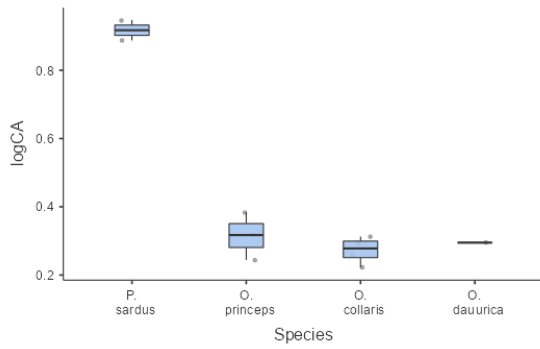


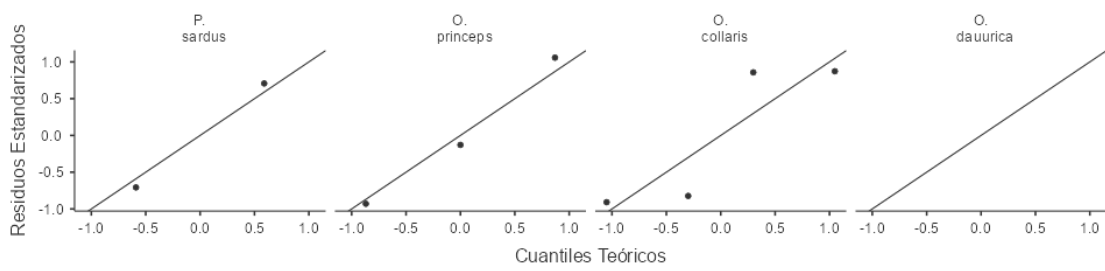
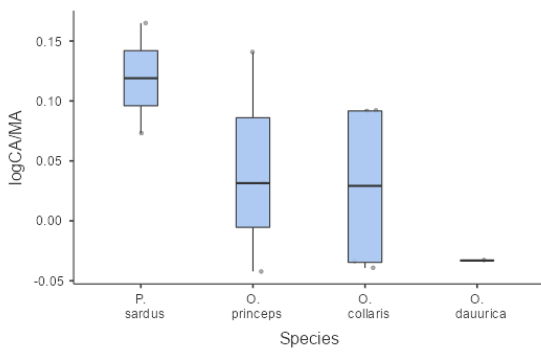
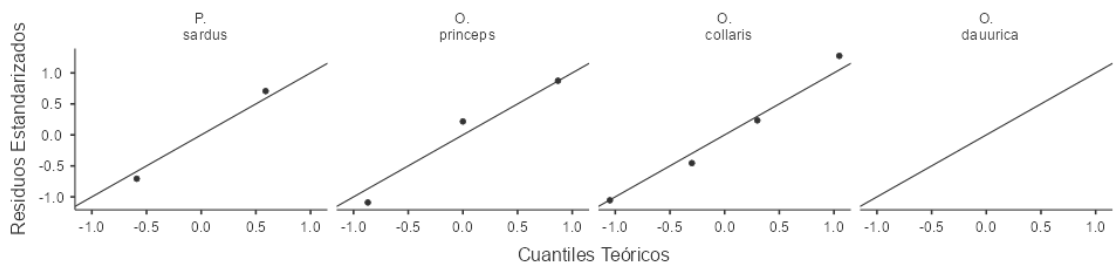
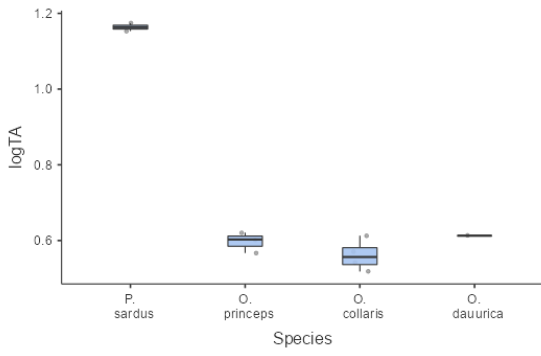
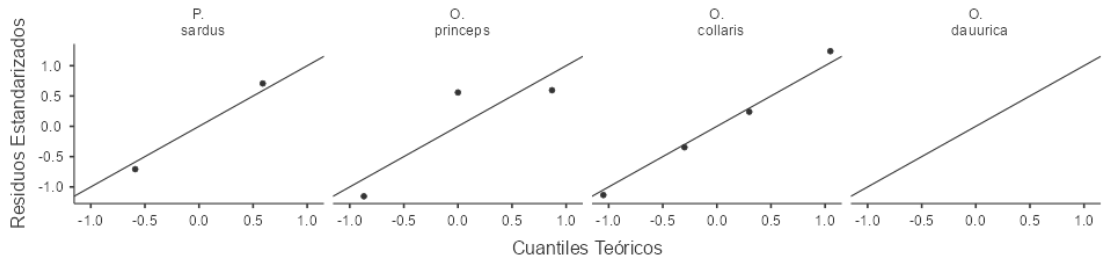


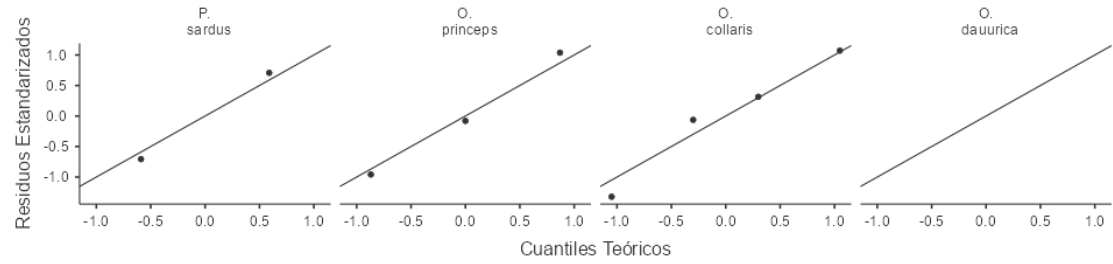
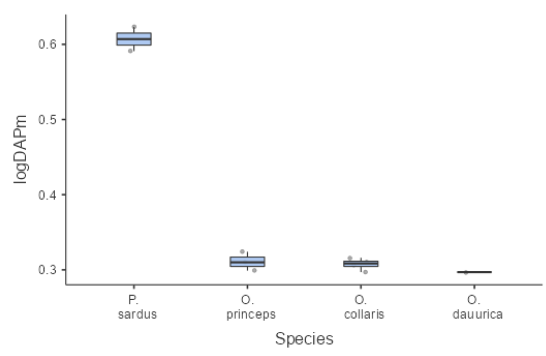
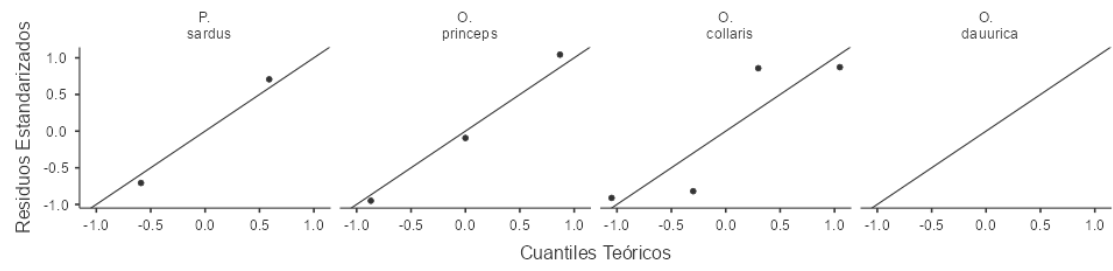
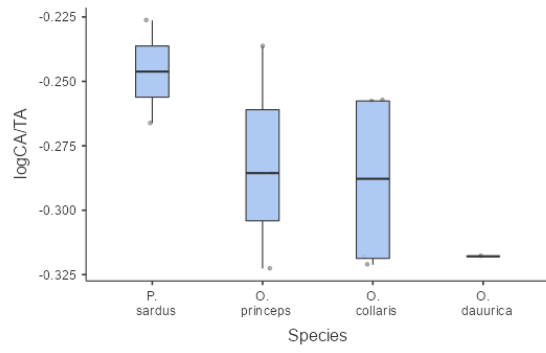
Levene's test (excluding *Oc. dauurica* because N=1)

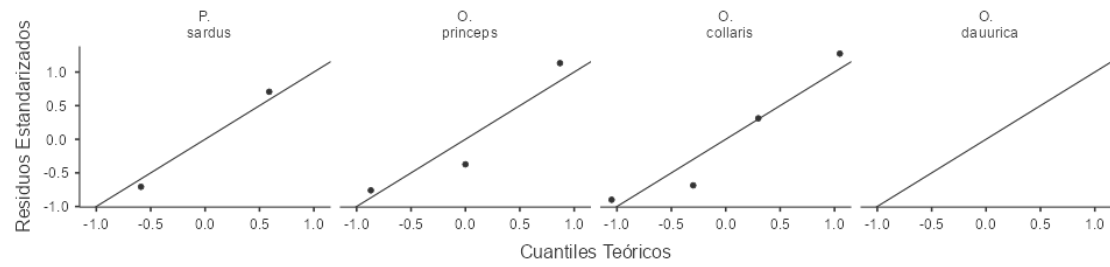
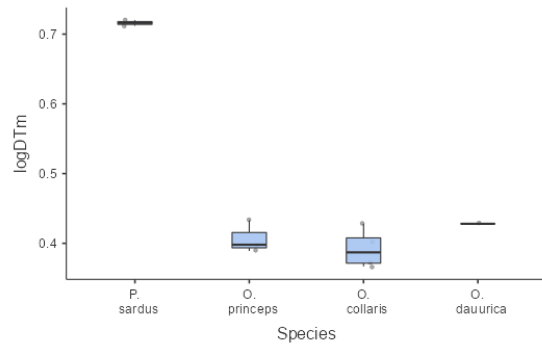
	F	g1	g2	p
logCA	0.398	2	6	0.688
logMA	1.814	2	6	0.242
logTA	1.177	2	6	0.370
logCA/MA	0.371	2	6	0.705
logCA/TA	0.530	2	6	0.614
logDAPm	2.819	2	6	0.137
logDTm	2.495	2	6	0.163

Graphics









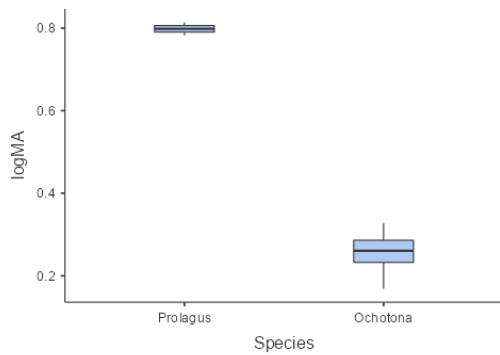
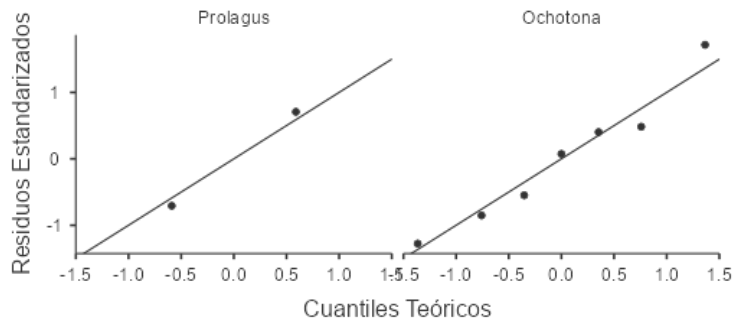
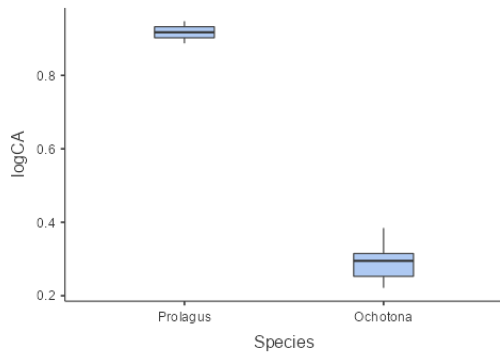
- Ochotona (all together) and P. sardus considering species (only adults).

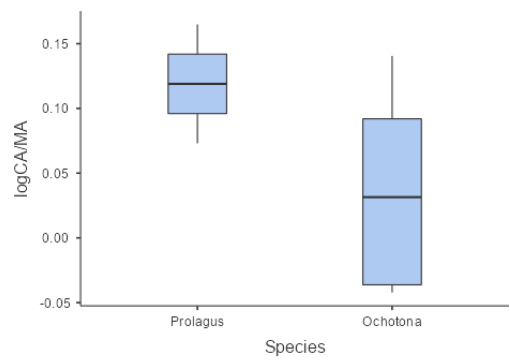
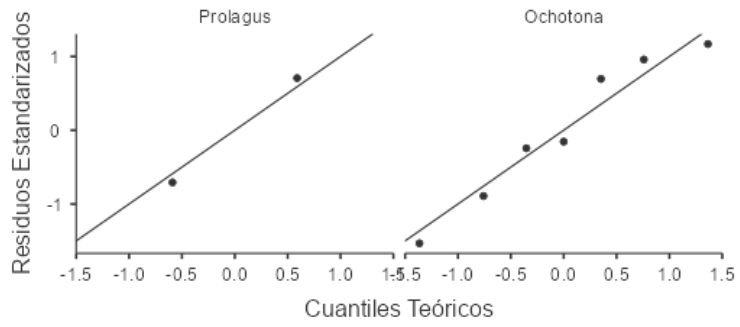
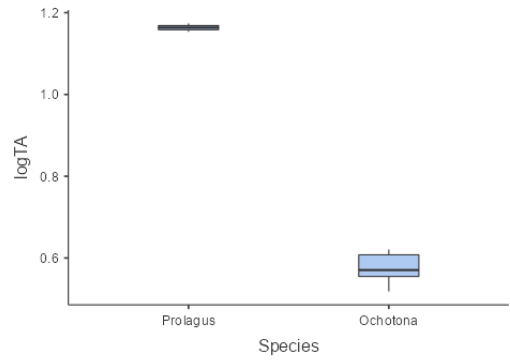
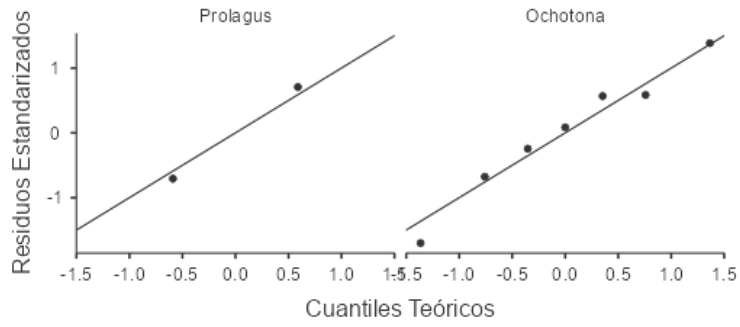
Continuous variables (logCA, logMA, logTA, logCA/MA, logCA/TA, log DAPm, logDTm) and grouping variable [species: *Ochotona* (all together) and *P. sardus*].

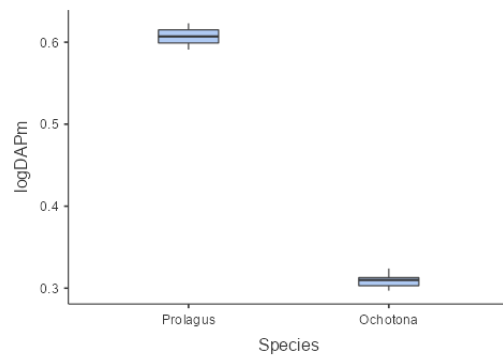
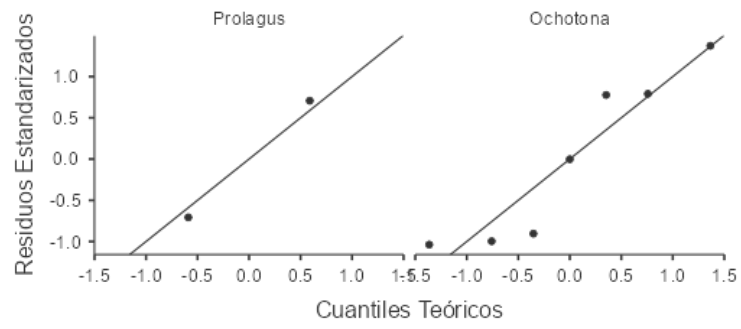
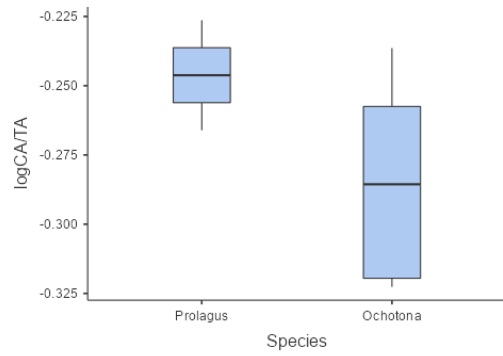
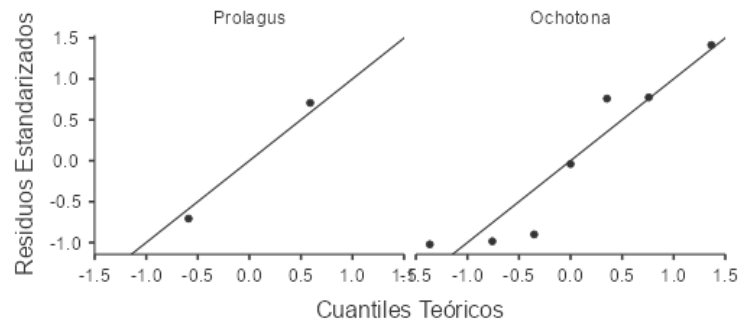
	Species	logCA	logMA	logTA	logCA/MA	logCA/TA	logDAPm	logDTm
N	<i>Prolagus</i>	2	2	2	2	2	2	2
	<i>Ochotona</i>	7	7	7	7	7	7	7
Perdidos	<i>Prolagus</i>	0	0	0	0	0	0	0
	<i>Ochotona</i>	0	0	0	0	0	0	0
Media	<i>Prolagus</i>	0.917	0.798	1.16	0.119	-0.246	0.607	0.716
	<i>Ochotona</i>	0.291	0.256	0.576	0.0345	-0.286	0.309	0.398
Mediana	<i>Prolagus</i>	0.917	0.798	1.16	0.119	-0.246	0.607	0.716
	<i>Ochotona</i>	0.295	0.261	0.571	0.0314	-0.286	0.310	0.398
Desviación estándar	<i>Prolagus</i>	0.0425	0.0225	0.0144	0.0650	0.0281	0.0226	0.00566
	<i>Ochotona</i>	0.0545	0.0517	0.0379	0.0750	0.0358	0.00935	0.0252
Mínimo	<i>Prolagus</i>	0.887	0.782	1.15	0.0730	-0.266	0.591	0.712
	<i>Ochotona</i>	0.221	0.169	0.518	-0.0422	-0.323	0.297	0.367
Máximo	<i>Prolagus</i>	0.947	0.814	1.17	0.165	-0.226	0.623	0.720
	<i>Ochotona</i>	0.384	0.328	0.621	0.141	-0.236	0.324	0.433
W de Shapiro-Wilk	<i>Prolagus</i>	NaN	NaN	NaN	NaN	NaN	NaN	NaN
	<i>Ochotona</i>	0.962	0.976	0.942	0.870	0.867	0.957	0.931
Valor p de Shapiro-Wilk	<i>Prolagus</i>	NaN	NaN	NaN	NaN	NaN	NaN	NaN
	<i>Ochotona</i>	0.840	0.937	0.656	0.186	0.174	0.796	0.561

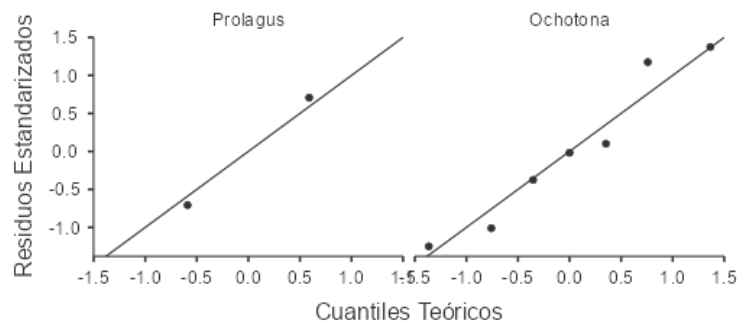
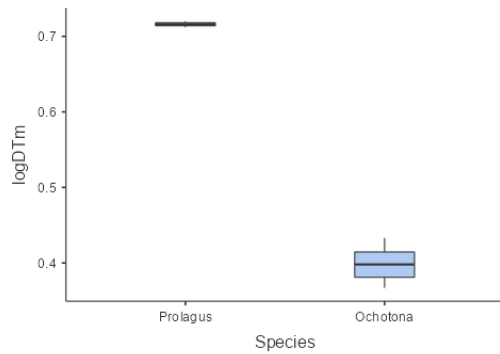
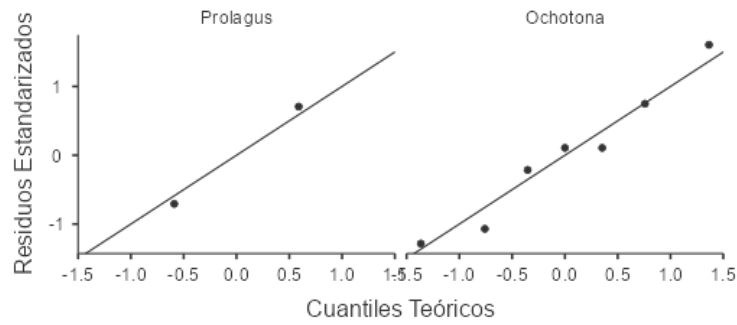
Levene's test				
	F	gl1	gl2	p
logCA	0.258	1	7	0.627
logMA	1.027	1	7	0.345
logTA	2.183	1	7	0.183
logCA/MA	0.553	1	7	0.481
logCA/TA	0.836	1	7	0.391
logDAPm	4.671	1	7	0.067
logDTm	1.966	1	7	0.204

Graphics









2) TEST OF EQUALITY OF MEANS

- *P. sardus* considering ontogenetic categories.

Dependent variables (logCA, logMA, logTA, logCA/MA, logCA/TA, log DAPm, logDTm) and grouping variable (age category: Juvenile, Young adult and Adult).

Kruskal-Wallis							
	χ^2	gl	p	ϵ^2			
logCA	4.23	2	0.121	0.3019			
logMA	8.00	2	0.018	*	0.5714		
logTA	8.05	2	0.018	*	0.5751		
logCA/MA	1.06	2	0.588		0.0759		
logCA/TA	1.06	2	0.588		0.0759		
logDAPm	4.55	2	0.103		0.3252		
logDTm	7.95	2	0.019	*	0.5682		

Dwass-Steel-Critchlow-Fligner pairwise comparisons

logMA					
		W		p	
Juvenile	Young adult	3.273		0.021	*
Juvenile	Adult	3.000		0.034	*
Young adult	Adult	-0.655		0.643	

logTA					
		W		p	
Juvenile	Young adult	3.06		0.145	
Juvenile	Adult	3.00		0.043	*
Young adult	Adult	1.96		1.000	

logDTm					
		W		p	
Juvenile	Young adult	2.84		0.044	*
Juvenile	Adult	3.00		0.034	*
Young adult	Adult	2.62		0.064	

- Ochotona considering species (only adults).

Dependent variables (logCA, logMA, logTA, logCA/MA, logCA/TA, log DAPm, logDTm) and grouping variable (species: *Oc. princeps* and *Oc. collaris*). *Oc. dauurica* is not considered because N=1.

ANOVA (Fisher)					
	F	g1	g2	p	
logCA	1.1083	1	5	0.341	
logMA	5.2894	1	5	0.070	
logTA	7.8795	1	5	0.038	*
logDAPm	0.0133	1	5	0.913	
logDTm	3.9722	1	5	0.103	

Kruskal-Wallis					
	χ^2	g1	p	ϵ^2	
logCA/MA	0.125	1	0.724	0.0208	
logCA/TA	0.125	1	0.724	0.0208	

- Ochotona (3 species) and *P. sardus* considering species (only adults).

Dependent variables (logCA, logMA, logTA, logCA/MA, logCA/TA, log DAPm, logDTm) and grouping variable (species: *P. sardus*, *Oc. princeps* and *Oc. collaris*). *Oc. dauurica* is not considered because N=1.

Kruskal-Wallis					
	χ^2	g1	p	ϵ^2	
logCA	4.90	2	0.086	0.612	
logMA	6.14	2	0.046	*	0.768
logTA	6.14	2	0.046	*	0.768
logCA/MA	1.00	2	0.607	0.125	

logCA/TA	1.00	2	0.607	0.125
logDAPm	4.25	2	0.119	0.532
logDTm	5.44	2	0.066	0.681

Dwass-Steel-Critchlow-Fligner pairwise comparisons

logMA				
		W	p	
<i>P. sardus</i>	<i>Oc. princeps</i>	-2.45	0.257	
<i>P. sardus</i>	<i>Oc. collaris</i>	-2.62	0.015	*
<i>Oc. princeps</i>	<i>Oc. collaris</i>	-2.50	0.163	

logTA				
		W	p	
<i>P. sardus</i>	<i>Oc. princeps</i>	-2.45	0.257	
<i>P. sardus</i>	<i>Oc. collaris</i>	-2.62	0.015	*
<i>Oc. princeps</i>	<i>Oc. collaris</i>	-2.50	0.163	

- *Ochotona* (all together) and *P. sardus* considering species (only adults).

Dependent variables (logCA, logMA, logTA, logCA/MA, logCA/TA, log DAPm, logDTm) and grouping variable [species: *Prolagus* and *Ochotona* (all together)].

Kruskal-Wallis					
	χ^2	gl	p	ϵ^2	
logCA	4.36	1	0.037	*	0.485
logMA	4.36	1	0.037	*	0.485
logTA	4.36	1	0.037	*	0.485
logCA/MA	1.09	1	0.296		0.121
logCA/TA	1.09	1	0.296		0.121
logDAPm	4.39	1	0.036	*	0.488
logDTm	4.36	1	0.037	*	0.485

3) ANALYSIS OF COVARIANCE

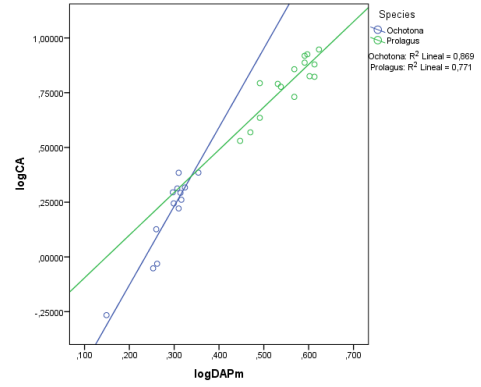
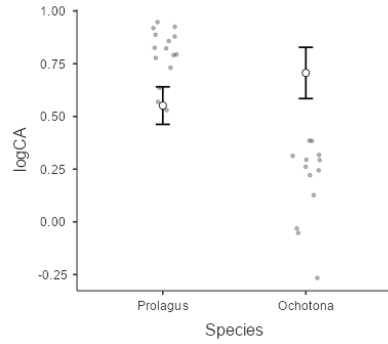
- *Ochotona* (all together) and *P. sardus* considering species (only adults).

ANCOVA - logCA						
	Sum of squares	gl	Quadratic mean	F	p	
Overall model	0.6501	3	0.21671	220.63	<.001	*
Species	0.0326	1	0.03261	6.99	0.014	*
logDAPm	0.5673	1	0.56732	121.58	<.001	*
logDAPm * Species	0.0502	1	0.05022	10.76	0.003	*
Residuals	0.1120	24	0.00467			

Levene's test				
F	gl1	gl2	p	
0.0528	1	26	0.820	

Shapiro-Wilk's test	
Statistic	p
0.976	0.751

Estimated Marginal means

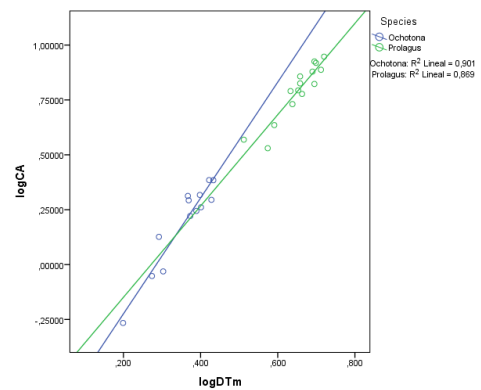
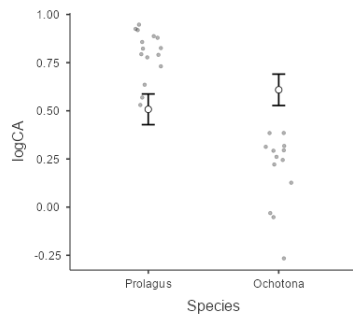


ANCOVA - logCA							
	Sum of squares	gl	Quadratic mean	F	p		
Overall model	0.58528	3	0.19509	333.752	<.001	*	
Species	0.00301	1	0.00301	0.963	0.336		
logDTm	0.57422	1	0.57422	183.939	<.001	*	
logDTm * Species	0.00805	1	0.00805	2.580	0.121		
Residuals	0.07492	24	0.00312				

Levene's test				
F	gl1	gl2	p	
0.985	1	26	0.330	

Shapiro-Wilk's test	
Statistic	p
0.983	0.923

Estimated Marginal means



ANCOVA - logCA							
	Sum of Squares	df	Mean Square	F	p		
Overall model	0.6132	2	0.30660	469.66	< .001	*	
Species	0.0115	1	0.01152	3.47	0.074		
logDTm	0.6017	1	0.60168	181.28	< .001	*	
Residuals	0.0830	25	0.00332				

Homogeneity of Variances Test (Levene's)			
F	df1	df2	p
1.74	1	26	0.199

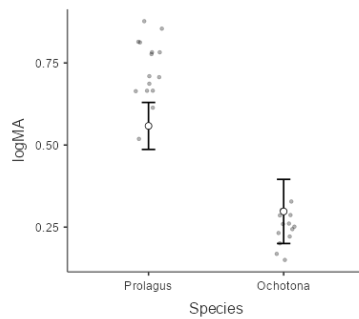
Normality Test (Shapiro-Wilk)	
Statistic	p
0.973	0.677

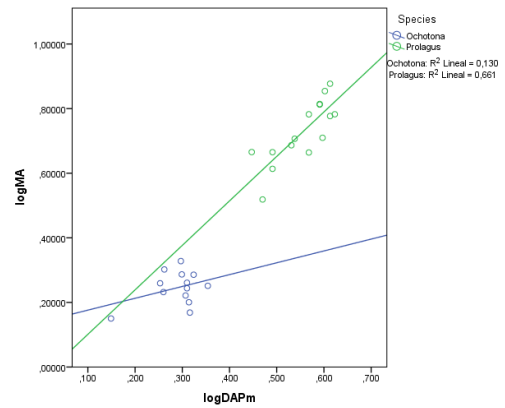
ANCOVA - logMA						
	Sum of squares	gl	Quadratic mean	F	p	
Overall model	0.07804	3	0.02601	190.08	< .001	*
Species	0.00324	1	0.00324	1.08	0.310	
logDAPm	0.05599	1	0.05599	18.59	< .001	*
logDAPm * Species	0.01881	1	0.01881	6.24	0.020	*
Residuals	0.07230	24	0.00301			

Levene's test			
F	gl1	gl2	p
0.780	1	26	0.385

Shapiro-Wilk's test	
Statistic	p
0.964	0.434

Estimated Marginal Means



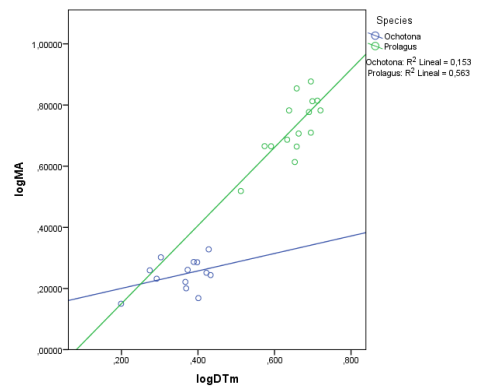
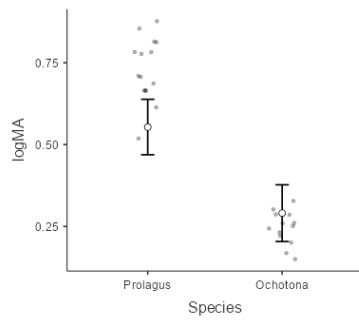


ANCOVA - logMA						
	Sum of squares	gl	Quadratic mean	F	p	
Overall model	0.09363	3	0.03121	161.25	<.001	*
Species	0.00530	1	0.00530	1.50	0.232	
logDTm	0.06297	1	0.06297	17.86	<.001	*
logDTm * Species	0.02536	1	0.02536	7.19	0.013	*
Residuals	0.08462	24	0.00353			

Levene's test				
F	gl1	gl2	p	
0.842	1	26	0.367	

Shapiro-Wilk's test		
Statistic	p	
0.993	0.999	

Estimated Marginal Means

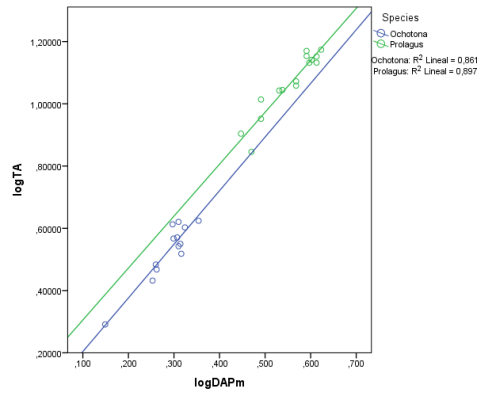
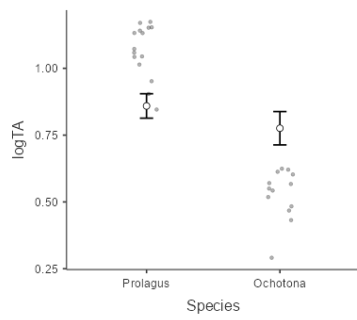


ANCOVA - logTA						
	Sum of squares	gl	Quadratic mean	F	p	
Overall model	0.21318	3	0.07106	603.2637	<.001	*
Species	0.00119	1	0.00119	0.9719	0.334	
logDAPm	0.21193	1	0.21193	172.5755	<.001	*
logDAPm * Species	5.41e-5	1	5.41e-5	0.0440	0.836	
Residuals	0.02947	24	0.00123			

Levene's test				
F	gl1	gl2	p	
0.160	1	26	0.692	

Shapiro-Wilk's test		
Statistic	p	
0.980	0.851	

Estimated Marginal Means



ANCOVA - logTA							
	Sum of Squares	df	Mean Square	F	p		
Overall model	0.22637	2	0.11319	940.85	< .001	*	
Species	0.00681	1	0.00681	5.77	0.024	*	
logDAPm	0.21956	1	0.21956	185.90	< .001	*	
Residuals	0.02953	25	0.00118				

Homogeneity of Variances Test (Levene's)				
F	df1	df2	p	
0.117	1	26	0.735	

Normality Test (Shapiro-Wilk)	
Statistic	p
0.980	0.857

ANCOVA - logTA						
	Sum of squares	gl	Quadratic mean	F	p	
Overall model	0.23441	3	0.07814	877.64	< .001	*
Species	0.00115	1	0.00115	1.35	0.256	
logDTm	0.22871	1	0.22871	269.83	< .001	*
logDTm * Species	0.00455	1	0.00455	5.37	0.029	*
Residuals	0.02034	24	8.48e-4			

Levene's test			
F	gl1	gl2	p
0.0614	1	26	0.806

Shapiro-Wilk's test	
Statistic	p
0.964	0.426

Estimated Marginal Means

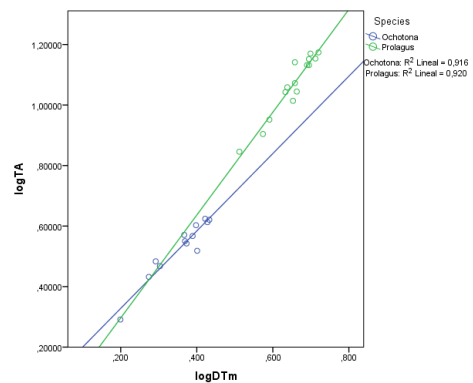
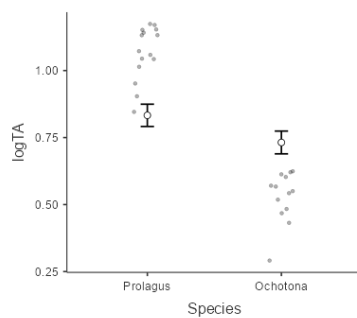


Table S1.

Species	Specimen	Laterality	Growth plate status (proximal/distal)	Age	DAPm	DTm	FLmax	FTDp	FAPDd	FTDd	BM
<i>P. sardus</i>	R129	R	NF/B	J	2.80	3.75	28.05	-	-	-	-
<i>P. sardus</i>	R77	R	NF/NF	J	2.95	3.25	29.10	-	-	-	-
<i>P. sardus</i>	R113	R	NF/NF	J	3.10	3.90	31.55	-	-	-	-
<i>P. sardus</i>	<u>R137</u>	R	NF/B	J	3.10	4.50	34.95	-	-	-	-
<i>P. sardus</i>	GD52	R	NF/NF	J	3.70	4.35	38.55	-	-	-	-
<i>P. sardus</i>	R000	R	NF/NF	J	3.40	4.30	39.65	-	-	-	-
<i>P. sardus</i>	R136	R	B/NF	Y	4.10	4.95	-	-	-	-	-
<i>P. sardus</i>	R30	R	NF/NF	J	3.70	4.55	42.60	-	-	-	-
<i>P. sardus</i>	<u>GD19</u>	R	NF/NF	J	4.10	4.90	44.80	-	-	-	-
<i>P. sardus</i>	<u>D19</u>	R	NF/NF	J	3.95	4.95	46.40	-	-	-	-
<i>P. sardus</i>	R12	R	SL/B	Y	3.45	4.60	-	-	-	-	-
<i>P. sardus</i>	A17	R	F/SL	Y	4.00	4.55	49.75	11.25	10.45	9.25	662.27
<i>P. sardus</i>	R44	R	F/SL	Y	3.90	5.00	-	-	9.65	9.00	569.11
<i>P. sardus</i>	R5	R	F/F	A	4.20	5.25	-	11.25	-	-	663.09
<i>P. sardus</i>	<u>B045</u>	R	F/F	A	3.90	5.15	-	11.40	10.80	10.00	730.28
<i>Oc. collaris</i>	UAM 2929	L	F/F	A	2.04	2.36	27.93	5.79	5.32	5.27	124.10
<i>Oc. collaris</i>	UAM 2947	L	F/F	A	2.03	2.33	28.01	5.65	5.47	5.33	126.90
<i>Oc. collaris</i>	UAM 58315	L	SL/SL	Y	1.79	1.88	24.06	5.13	4.49	4.91	67.00
<i>Oc. collaris</i>	UAM 63933	L	F/F	A	2.06	2.34	28.67	5.45	5.34	5.35	121.20
<i>Oc. collaris</i>	UAM 63937	L	F/F	A	2.07	2.52	28.12	5.75	5.35	5.39	122.30
<i>Oc. dauurica</i>	MSB 215075	L	F/SL	Y	1.82	1.96	23.20	5.44	5.30	5.25	81.00
<i>Oc. dauurica</i>	MSB 215674	L	NF/NF	J	1.83	2.01	-	4.77	-	-	48.00
<i>Oc. dauurica</i>	MSB 215680	L	SL/SL	Y	2.26	2.64	27.17	6.09	6.16	5.61	139.00
<i>Oc. dauurica</i>	MSB 215940	L	NF/NF	J	1.41	1.58	-	-	-	-	25.00
<i>Oc. dauurica</i>	MSB 215953	L	F/F	A	1.98	2.68	30.01	6.25	6.07	5.73	141.00

<i>Oc. princeps</i>	UAM 35060	L	F/F	A	2.04	2.71	29.64	6.14	5.45	5.25	130.00
<i>Oc. princeps</i>	UAM 35119	L	F/F	A	1.99	2.45	27.51	5.61	5.55	5.38	-
<i>Oc. princeps</i>	UAM 113936	L	F/F	A	2.11	2.5	28.72	5.89	5.56	5.48	144.00

Table S2.

Species	Specimen	Age category	Geometric data										Size data				
			CA (mm ²)	MA (mm ²)	TA (mm ²)	CA/MA	CA/TA	logCA	logMA	logTA	logCA/M A	logCA/T A	DAPM (mm)	logDAP M	DTM (mm)	logDT M	BM (g)
<i>P. sardus</i>	R129	Juvenile	3.389	4.629	8.018	0.73212	0.42267	0.53007	0.66549	0.90407	-0.13542	-0.37399	2.80	0.447	3.75	0.574	-
<i>P. sardus</i>	R77	Juvenile	3.708	3.301	7.009	1.12330	0.52903	0.56914	0.51865	0.84566	0.05049	-0.27652	2.95	0.470	3.25	0.512	-
<i>P. sardus</i>	R113	Juvenile	4.320	4.626	8.946	0.93385	0.48290	0.63548	0.66521	0.95163	-0.02972	-0.31615	3.10	0.491	3.90	0.591	-
<i>P. sardus</i>	R137	Juvenile	6.218	4.108	10.326	1.51363	0.60217	0.79365	0.61363	1.01393	0.18002	-0.22028	3.10	0.491	4.50	0.653	-
<i>P. sardus</i>	GD52	Juvenile	5.382	6.058	11.440	0.88841	0.47045	0.73094	0.78233	1.05843	-0.05139	-0.32748	3.70	0.568	4.35	0.638	-
<i>P. sardus</i>	R000	Juvenile	6.172	4.860	11.032	1.26996	0.55946	0.79043	0.68664	1.04265	0.10379	-0.25223	3.40	0.531	4.30	0.633	-
<i>P. sardus</i>	R136	Young adult	6.650	7.535	14.185	0.88255	0.46881	0.82282	0.87708	1.15183	-0.05426	-0.32901	4.10	0.613	4.95	0.695	-
<i>P. sardus</i>	R30	Juvenile	7.198	4.614	11.812	1.56003	0.60938	0.85721	0.66408	1.07232	0.19313	-0.21511	3.70	0.568	4.55	0.658	-
<i>P. sardus</i>	GD19	Juvenile	7.569	5.983	13.552	1.26508	0.55852	0.87904	0.77692	1.13200	0.10212	-0.25296	4.10	0.613	4.90	0.690	-
<i>P. sardus</i>	D19	Juvenile	8.420	5.124	13.544	1.64325	0.62168	0.92531	0.70961	1.13175	0.21570	-0.20643	3.95	0.597	4.95	0.695	-
<i>P. sardus</i>	R12	Young adult	5.988	5.089	11.077	1.17666	0.54058	0.77728	0.70663	1.04442	0.07065	-0.26714	3.45	0.538	4.60	0.663	-
<i>P. sardus</i>	A17	Young adult	6.690	7.150	13.840	0.93566	0.48338	0.82543	0.85431	1.14114	-0.02888	-0.31571	4.00	0.602	4.55	0.658	662.268
<i>P. sardus</i>	R44	Young adult	8.294	6.494	14.788	1.27718	0.56086	0.91876	0.81251	1.16991	0.10625	-0.25115	3.90	0.591	5.00	0.699	569.106
<i>P. sardus</i>	R5	Adult	8.859	6.060	14.919	1.46188	0.59381	0.94738	0.78247	1.17374	0.16491	-0.22636	4.20	0.623	5.25	0.720	663.089
<i>P. sardus</i>	B045	Adult	7.714	6.520	14.234	1.18313	0.54194	0.88728	0.81425	1.15333	0.07303	-0.26605	3.90	0.591	5.15	0.712	730.275
	Juveniles	Mean	5.820	4.811	10.631	1.21440	0.53959	0.74570	0.67584	1.01694	0.06986	-0.27124	3.42	0.531	4.27	0.627	-
		SD	1.761	0.859	2.294	0.32102	0.06897	0.14000	0.08043	0.09888	0.12141	0.05745	0.46	0.059	0.55	0.059	-
	Young adults	Mean	6.906	6.567	13.473	1.06801	0.51341	0.83607	0.81263	1.12682	0.02344	-0.29075	3.86	0.586	4.78	0.679	615.687
		SD	0.980	1.075	1.644	0.18927	0.04428	0.05939	0.07556	0.05620	0.07716	0.03747	0.29	0.033	0.23	0.021	65.875
	Adults	Mean	8.287	6.290	14.577	1.32251	0.56787	0.91733	0.79836	1.16353	0.11897	-0.24620	4.05	0.607	5.20	0.716	696.682
		SD	0.810	0.325	0.484	0.19711	0.03667	0.04250	0.02247	0.01443	0.06497	0.02807	0.21	0.023	0.07	0.006	47.508
<i>Oc. princeps</i>	UAM 35060	Adult	2.423	1.753	4.176	1.38220	0.58022	0.38435	0.24378	0.62076	0.14057	-0.23641	2.04	0.310	2.71	0.433	130.0
<i>Oc. princeps</i>	UAM 35119	Adult	1.756	1.935	3.691	0.90749	0.47575	0.24452	0.28668	0.56714	-0.04216	-0.32262	1.99	0.299	2.45	0.389	144.3
<i>Oc. princeps</i>	UAM 113936	Adult	2.076	1.931	4.007	1.07509	0.51809	0.31723	0.28578	0.60282	0.03145	-0.28559	2.11	0.324	2.50	0.398	144.0

<i>Oc. collaris</i>	UAM 2929	Adult	1.665	1.823	3.488	0.91333	0.47735	0.22141	0.26079	0.54258	-0.03937	-0.32116	2.04	0.310	2.36	0.373	124.1
<i>Oc. collaris</i>	UAM 2947	Adult	2.055	1.665	3.720	1.23423	0.55242	0.31281	0.22141	0.57054	0.09140	-0.25773	2.03	0.307	2.33	0.367	126.9
<i>Oc. collaris</i>	UAM 58315	Young adult	0.887	1.817	2.704	0.48817	0.32803	-0.05208	0.25935	0.43201	-0.31143	-0.48408	1.79	0.253	1.88	0.274	67.0
<i>Oc. collaris</i>	UAM 63937	Adult	1.824	1.474	3.298	1.23745	0.55306	0.26102	0.16850	0.51825	0.09253	-0.25723	2.07	0.316	2.52	0.401	122.3
<i>Oc. collaris</i>	UAM 63933	Adult	1.962	1.587	3.549	1.23629	0.55283	0.29270	0.20058	0.55011	0.09212	-0.25741	2.06	0.314	2.34	0.369	121.2
<i>Oc. daurica</i>	MSB 215075	Young adult	1.338	1.706	3.044	0.78429	0.43955	0.12646	0.23198	0.48344	-0.10552	-0.35699	1.82	0.260	1.96	0.292	81.0
<i>Oc. daurica</i>	MSB 215674	Juvenile	0.931	2.005	2.936	0.46434	0.31710	-0.03105	0.30211	0.46776	-0.33316	-0.49881	1.83	0.262	2.01	0.303	48.0
<i>Oc. daurica</i>	MSB 215680	Young adult	2.426	1.784	4.210	1.35987	0.57625	0.38489	0.25139	0.62428	0.13350	-0.23939	2.26	0.354	2.64	0.422	139.0
<i>Oc. daurica</i>	MSB 215940	Juvenile	0.542	1.413	1.955	0.38358	0.27724	-0.26600	0.15014	0.29115	-0.41614	-0.55715	1.41	0.149	1.58	0.199	25.0
<i>Oc. daurica</i>	MSB 215953	Adult	1.972	2.128	4.100	0.92669	0.48098	0.29491	0.32797	0.61278	-0.03306	-0.31788	1.98	0.297	2.68	0.428	141.0
<i>Adults</i>	<i>Oc. princeps</i>	Mean	2.085	1.873	3.958	1.122	0.525	0.315	0.272	0.597	0.043	-0.282	2.047	0.311	2.553	0.407	139.420
		SD	0.334	0.104	0.246	0.241	0.053	0.070	0.025	0.027	0.092	0.043	0.060	0.013	0.138	0.023	8.159
	<i>Oc. collaris</i>	Mean	1.877	1.637	3.514	1.155	0.534	0.272	0.213	0.545	0.059	-0.273	2.050	0.312	2.388	0.378	123.625
		SD	0.170	0.147	0.174	0.161	0.038	0.040	0.039	0.022	0.066	0.032	0.018	0.004	0.089	0.016	2.489
	<i>Oc. daurica</i>	Mean	1.972	2.128	4.100	0.927	0.481	0.295	0.328	0.613	-0.033	-0.318	1.980	0.297	2.680	0.428	141.000
		SD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Adults Ochotona	Mean	1.967	1.787	3.754	1.11410	0.52384	0.29112	0.24944	0.57312	0.04168	-0.28200	2.04	0.310	2.49	0.395	131.7	
	SD	0.234	0.212	0.313	0.18365	0.04146	0.05042	0.05177	0.03633	0.07238	0.03458	0.04	0.009	0.15	0.025	9.8	