

SUPPLEMENTARY MATERIAL

Struggling with fish age, a comparison of otolith preparation techniques to unravel age and growth of boarfish, *Capros aper* (Linnaeus, 1758)

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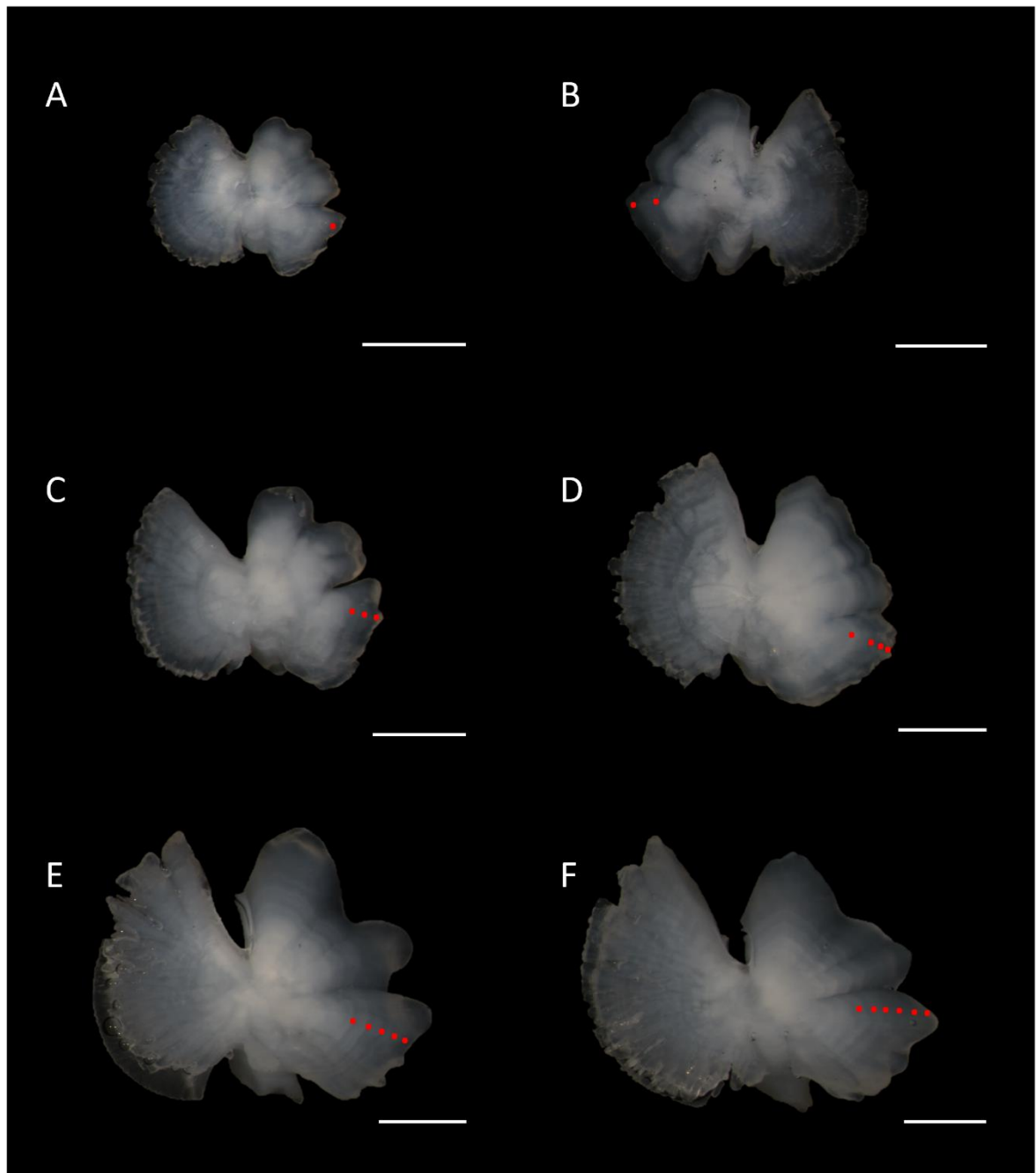
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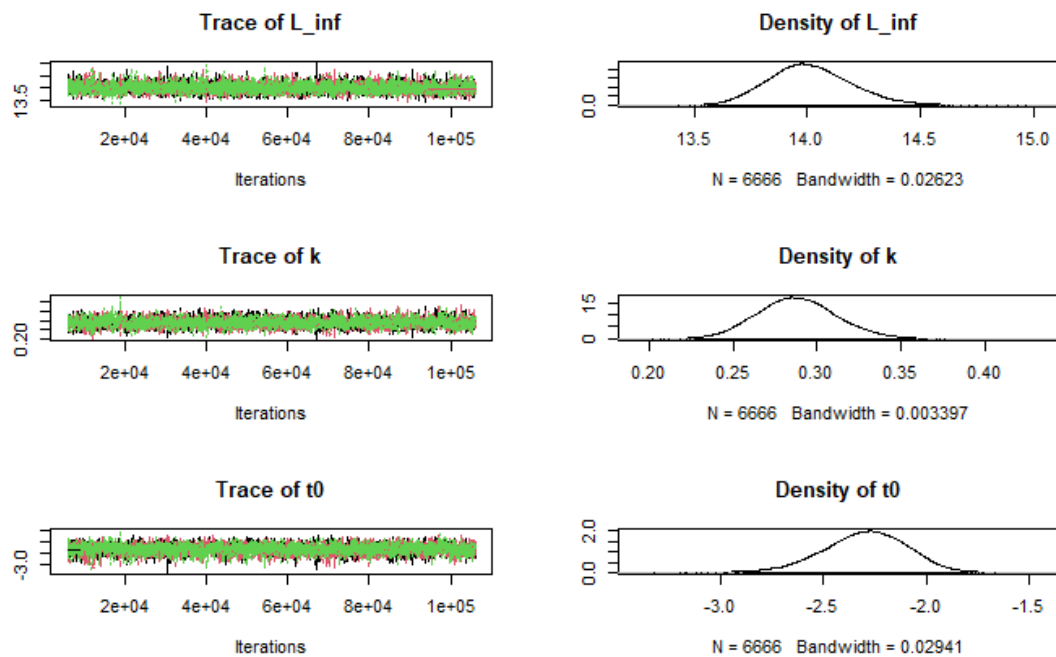
Supplementary Figure S.1. Otolith growth evolution. (A) left *sagitta* otolith of a 1 year-old female boarfish individual, with 7.2 cm TL; (B) right *sagitta* otolith of a 2 year-old male boarfish, with 10.8 cm TL; (C) left *sagitta* otolith of a 3 year-old female boarfish individual with 11.5 cm TL; (D) left *sagitta* otolith of a 4 year-old female boarfish individual, with 12.6 cm TL; (E) left *sagitta* otolith of a 5 year-old male boarfish individual, with 12.9 cm TL; (F) left *sagitta* otolith of a 6 year-old female boarfish individual, with 12.2 cm TL; Scale bars = 1 mm.

Supplementary Table S.1. Age-length key for boarfish from the Portuguese continental coast for the period 2011-2012, from whole otolith readings; n – number of fish, Mean TL – mean total fish length; SD – standard deviation.

TL (cm)	Age (years)																n
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
4	1																1
5	2																2
6	17																17
7	4	5															9
8	1	5															6
9		4															4
10		2	4			2	1	1									10
11			2	4	17	18	15	13	5	3							77
12				1	14	22	40	32	23	10	7	1					150
13				1		8	23	34	35	15	8	3	1	1		1	130
14						1	2	10	15	3	5	4	1	1			42
15								1	3	3				1	1		9
16										1		3	1				5
17													1				1
n	25	16	6	6	31	51	81	91	81	35	20	11	4	3	1	1	
Mean TL	6.54	8.64	11	12.08	11.93	12.24	12.54	12.91	13.3	13.29	13.34	14.43	15.43	14.57	15.4	13.2	463
SD	0.76	1.14	0.49	0.93	0.55	0.82	0.75	0.89	0.9	1.09	0.69	1.48	1.49	0.59	NA	NA	

Supplementary Table S.2. Summary statistics for the Bayes. VBGM 3p model fit to boarfish from the Portuguese continental coast. Mean, standard deviation, median, and lower and upper 2.5 percentiles of the posterior distribution for each growth parameter are given.

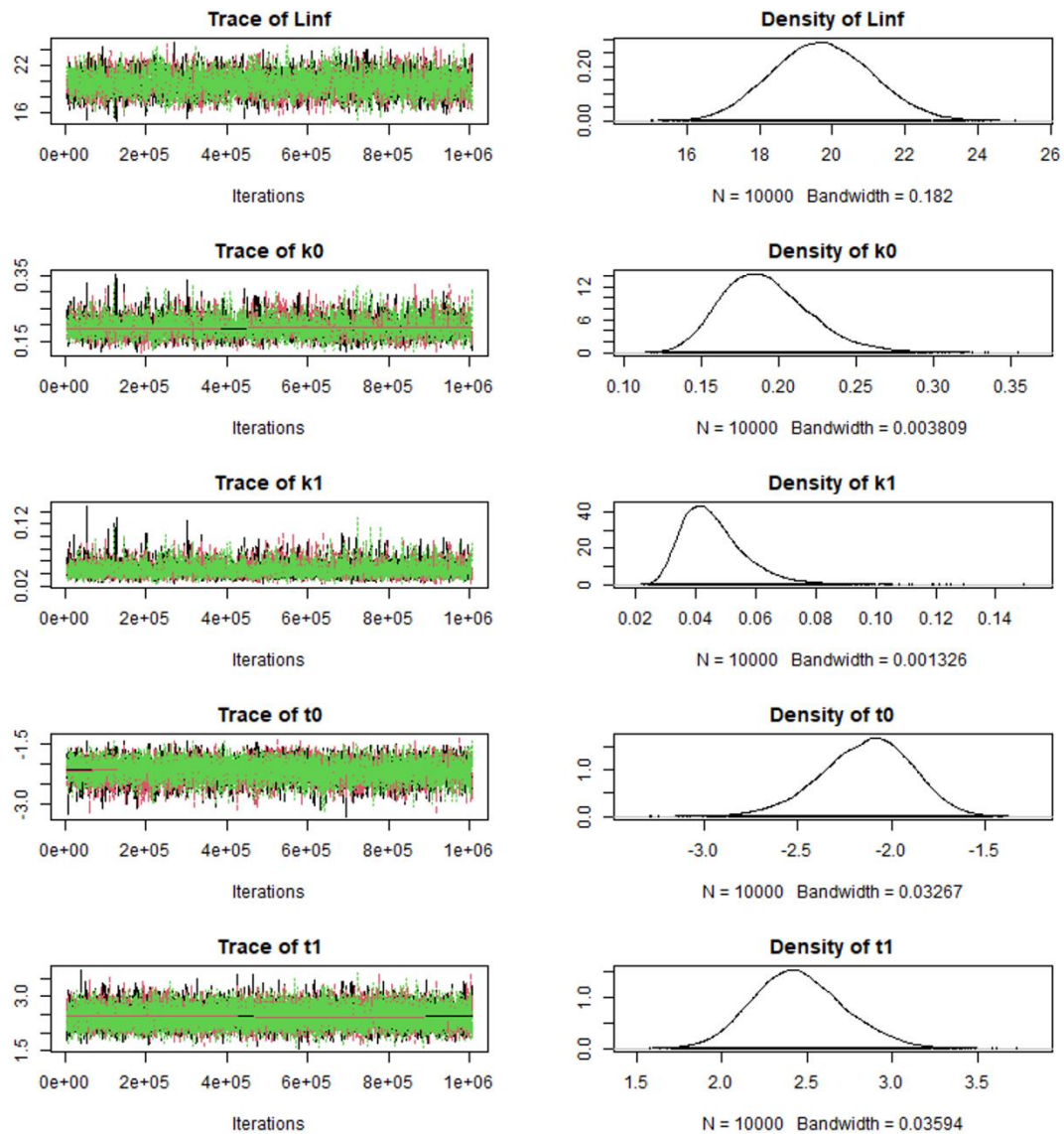
Parameters	Mean	Standard Deviation	Bayesian credibility intervals		
			2.5%	Median	97.5%
L_{∞} (cm)	14.01	0.18	13.68	14.00	14.39
k (yr ⁻¹)	0.29	0.02	0.25	0.29	0.34
t_0 (yr)	-2.30	0.20	-2.71	-2.28	-1.92



Supplementary Figure S.2. Convergence diagnostics plots of the model Bayes. VBGM 3p. Left side plots represent trace plots of three concurrent chains used for model convergence with MCMC for each model parameter, with different colours representing each chain. Right side plots represent density plots of the posterior marginal distribution for each model parameter.

Supplementary Table S.3. Summary statistics for the Bayes. VBGM 5p model fit to boarfish from the Portuguese continental coast. Mean, standard deviation, median, and lower and upper 2.5 percentiles of the posterior distribution for each growth parameter are given.

Parameters	Mean	Standard Deviation	Bayesian credibility intervals		
			2.5%	Median	97.5%
L_{∞} (cm)	19.68	1.38	17.06	19.67	22.41
k_0 (yr ⁻¹)	0.19	0.03	0.14	0.19	0.26
k_1 (yr ⁻¹)	0.05	0.01	0.03	0.04	0.07
t_0 (yr)	-2.12	0.25	-2.64	-2.11	-1.68
t_1 (yr)	2.44	0.27	1.95	2.43	3.00



Supplementary Figure S.3. Convergence diagnostics plots of the model Bayes. VBGM 5p. Left side plots represent trace plots of three concurrent chains used for model convergence with MCMC for each model parameter, with different colours representing each chain. Right side plots represent density plots of the posterior marginal distribution for each model parameter.