

Article

The Use of Daily Growth to Analyze Individual Spawning Dynamics in an Asynchronous Population: The Case of the European Hake from the Southern Stock [†]

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Table S1. Data from the daily growth analysis of the adult females of European hake captured in 2017. A total of 54 females were analysed: 23 developing (D) females, 18 regressing (RG) females and 13 regenerating (RN) females. Each row corresponds to one sampled female, SP to the assumed spawning peak in which each female spawn (SP1 or SP2), capture date, TL to the total length of each female (in cm), otolith radius to the ventral radius (in μm), n rings the number of rings that were able to be read and Std distance, the standard distance mean between daily increments (and the standard deviation) (in μm).

Ovary phase	SP	Capture date	TL (cm)	otolith radius (μm)	n rings	Std distance (SD) (μm)
D	SP1	20/02	62.50	3 634.81	65	8.78×10^{-4} (2.3×10^{-4})
	SP2	20/02	58.60	3 359.78	54	9.04×10^{-4} (2.28×10^{-4})
	SP2	01/03	73.00	4 132.38	165	6.18×10^{-4} (1.62×10^{-4})
	SP2	22/03	34.00	2 730.23	34	1.04×10^{-3} (4.11×10^{-4})
	SP2	03/04	61.40	4 072.88	97	7.95×10^{-4} (2.58×10^{-4})
	SP2	22/05	58.00	3 358.41	58	1.62×10^{-3} (4.97×10^{-4})
	SP2	22/05	52.00	3 303.01	40	9.59×10^{-4} (2.82×10^{-4})
	SP2	22/05	54.00	3 971.95	59	1.16×10^{-3} (3.16×10^{-4})
	SP2	29/05	51.50	3 511.29	35	2.24×10^{-3} (7.52×10^{-4})
	SP2	29/05	65.00	4 517.30	61	8.63×10^{-4} (3.05×10^{-4})
	SP2	29/05	48.70	3 221.23	164	1.03×10^{-3} (3.41×10^{-4})
	SP2	06/06	67.80	4 350.93	34	6.23×10^{-4} (2.20×10^{-4})
	SP2	06/06	58.60	3 714.24	55	8.53×10^{-4} (3.01×10^{-4})
	SP2	06/06	56.80	3 811.41	50	8.49×10^{-4} (2.54×10^{-4})
	SP2	06/06	59.90	3 772.46	99	1.08×10^{-3} (3.44×10^{-4})
	SP2	06/06	57.50	4 402.18	57	8.63×10^{-4} (2.29×10^{-4})
	SP2	04/07	50.30	3 392.44	87	1.06×10^{-3} (2.17×10^{-4})
	SP2	10/07	79.20	4 228.58	38	1.56×10^{-3} (5.22×10^{-4})
	SP2	10/07	53.60	3 412.61	40	2.15×10^{-3} (5.98×10^{-4})
	SP2	10/07	61.30	3 798.12	128	7.32×10^{-4} (1.87×10^{-4})
RG	SP2	10/07	58.00	3 723.89	124	5.66×10^{-4} (1.57×10^{-4})
	SP2	10/07	58.70	3 587.58	117	8.71×10^{-4} (2.46×10^{-4})
	SP2	10/07	50.60	3 326.09	288	1.02×10^{-3} (2.70×10^{-4})
	SP1	22/05	46.00	3 409.62	62	4.81×10^{-4} (1.97×10^{-4})
	SP1	22/05	53.00	3 599.04	76	1.12×10^{-3} (3.94×10^{-4})
	SP1	23/05	72.00	4 487.13	57	5.15×10^{-4} (1.51×10^{-4})
	SP1	23/05	65.00	4 034.48	29	6.27×10^{-4} (1.50×10^{-4})
	SP2	04/07	55.20	3 914.89	35	8.29×10^{-4} (2.43×10^{-4})
SP2	04/07	51.40	3 620.35	34	1.62×10^{-3} (7.45×10^{-4})	
SP2	10/07	54.90	3 330.79	19	1.01×10^{-3} (2.99×10^{-4})	

	SP2	10/07	55.50	3 631.00	39	1.47 × 10 ⁻⁴ (4.51 × 10 ⁻⁴)
	SP2	10/07	53.60	3 505.81	51	7.02 × 10 ⁻⁴ (2.43 × 10 ⁻⁴)
	SP1	05/05	48.50	3 609.23	64	9.29 × 10 ⁻⁴ (2.18 × 10 ⁻⁴)
	SP1	05/05	47.50	3 190.13	56	9.62 × 10 ⁻⁴ (2.95 × 10 ⁻⁴)
	SP1	05/05	49.80	3 692.97	46	1.01 × 10 ⁻³ (2.07 × 10 ⁻⁴)
	SP1	05/05	45.30	3 483.75	59	1.07 × 10 ⁻³ (3.77 × 10 ⁻⁴)
	SP1	25/05	49.10	3 640.34	100	9.64 × 10 ⁻⁴ (2.78 × 10 ⁻⁴)
	SP2	18/07	45.70	3 054.01	187	9.72 × 10 ⁻⁴ (3.16 × 10 ⁻⁴)
	SP2	27/07	53.10	3 797.93	116	7.28 × 10 ⁻⁴ (2.71 × 10 ⁻⁴)
	SP2	27/07	51.50	3 185.28	50	8.80 × 10 ⁻⁴ (3.37 × 10 ⁻⁴)
	SP2	27/07	46.00	3 324.72	47	9.76 × 10 ⁻⁴ (2.75 × 10 ⁻⁴)
	SP1	22/05	59.00	3 661.58	25	1.21 × 10 ⁻³ (4.08 × 10 ⁻⁴)
	SP1	22/05	60.00	3 856.94	45	1.12 × 10 ⁻³ (3.94 × 10 ⁻⁴)
	SP1	22/05	47.00	3 260.27	154	1.47 × 10 ⁻³ (6.11 × 10 ⁻⁴)
	SP1	22/05	55.00	3 494.60	18	1.30 × 10 ⁻³ (4.48 × 10 ⁻⁴)
	SP1	29/05	55.40	3 583.18	47	1.01 × 10 ⁻³ (2.83 × 10 ⁻⁴)
	SP1	06/06	52.00	3 262.84	146	1.07 × 10 ⁻³ (4.62 × 10 ⁻⁴)
RN	SP2	04/07	54.50	3 250.55	118	7.71 × 10 ⁻⁴ (2.92 × 10 ⁻⁴)
			Table S1. Cont			
	SP2	04/07	57.50	4 134.42	62	1.04 × 10 ⁻³ (3.24 × 10 ⁻⁴)
	SP2	04/07	49.00	3 054.91	78	1.11 × 10 ⁻³ (4.13 × 10 ⁻⁴)
	SP2	04/07	57.80	3 971.38	45	6.35 × 10 ⁻⁴ (2.71 × 10 ⁻⁴)
	SP2	04/07	55.10	3 749.69	46	9.31 × 10 ⁻⁴ (3.45 × 10 ⁻⁴)
	SP2	04/07	58.00	3 683.30	86	1.32 × 10 ⁻³ (4.77 × 10 ⁻⁴)
	SP2	10/07	55.50	4 021.25	81	8.87 × 10 ⁻⁴ (2.96 × 10 ⁻⁴)

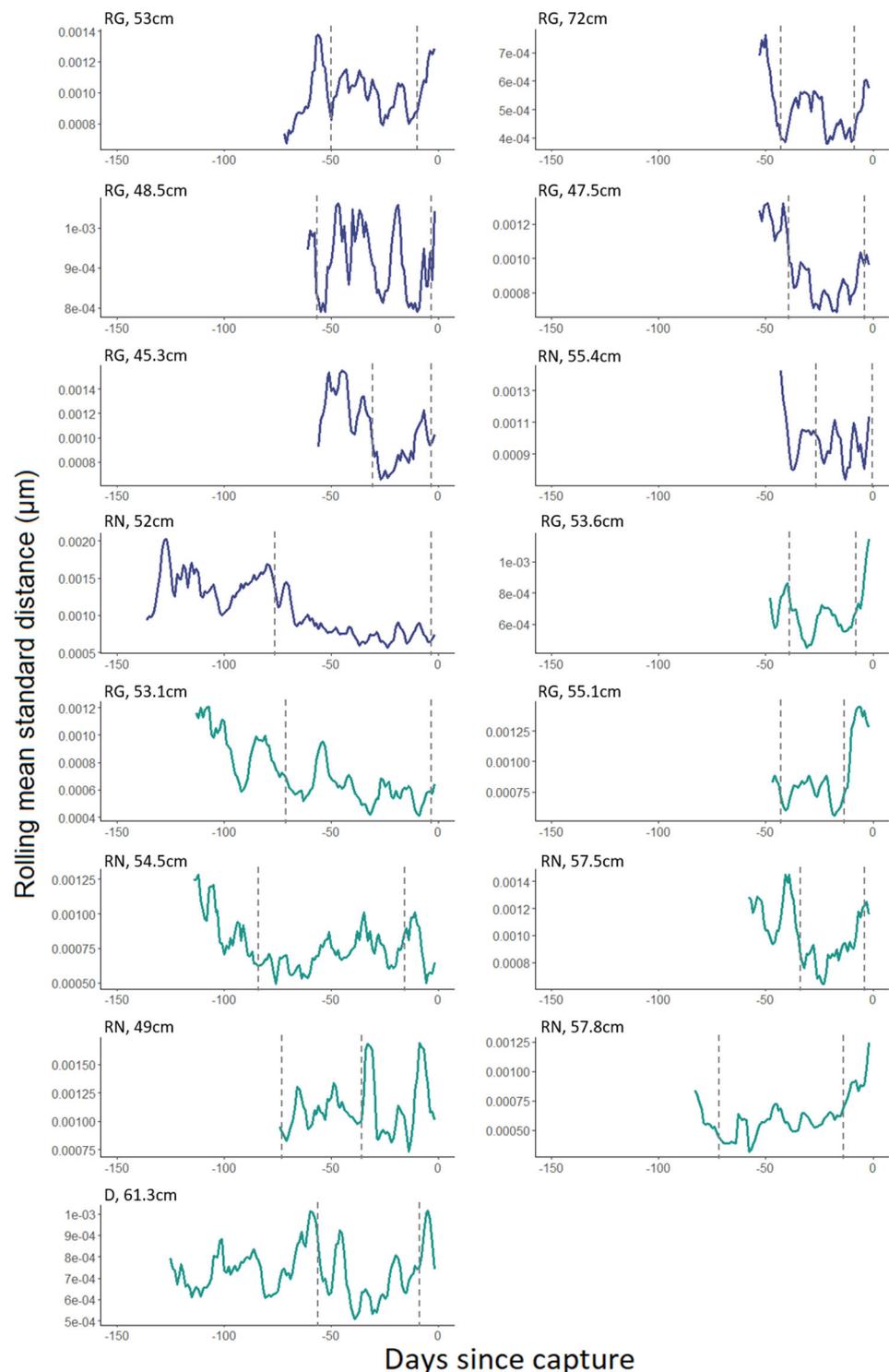


Figure S1. Rolling mean standard distance (μm) of daily increment time series (of the last 150 days of life) in European hake females captured in 2017 with a detected spawning pattern: period with 4–6 valleys of reduced daily growth extending over 30–60 days (period marked in the figure between vertical dashed grey lines). Dark blue represents females which spawn in SP1 (Dec–Mar) and dark green represents females which spawn in SP2 (Apr–Jul). Ovary phase (D: developing, RG: regressing, RN: regenerating) and total length (cm) are showed in the upper part of each plot. Note the difference in the y axis.