

The following supplement accompanies the article

Determinate or indeterminate growth? Revisiting the growth strategy of sea turtles

**Lucy C.M. Omeyer, Wayne J. Fuller, Robin T.E. Snape, Brendan J. Godley,
Annette C. Broderick***

*Corresponding author: email@email.com

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Table S1. Breakdown of the datasets for both species. n: number of females.

Growth records	1992 – 2017		2000 – 2017	
	Green turtles (n = 147)	Loggerhead turtles (n = 85)	Green turtles (n = 104)	Loggerhead turtles (n = 45)
1	147	85	104	45
2	76	30	42	13
3	50	18	18	5
4	28	12	7	4
5	18	6	2	1
6	14	3	1	1
7	5	2	0	0
8	1	2	0	0
Total	339	158	174	69

Table S2. Statistical output from GAMM models to investigate the potential influence of different covariates on annual growth response of green turtles. YearSFC: year since first capture. CCL: curved carapace length. RI: remigration interval. Edf: estimated degrees of freedom. SE: standard error.

Model	Adj r^2	AIC	Variable	Edf	F	Prob(F)	Variable	Estimate	SE	t
GAMM _{YearsSFC+MeanCCL+RI}	0.24	499.14	YearsSFC	2.77	15.58	<0.0001	Intercept	0.32	0.05	7.28
			MeanCCL (cm)	1.00	19.70	<0.0001				
			RI (yr)	1.00	0.43	0.51				
GAMM _{YearsSFC+MeanCCL}	0.24	495.00	YearsSFC	2.82	17.57	<0.0001	Intercept	0.32	0.04	7.30
			MeanCCL (cm)	1.00	19.51	<0.0001				
GAMM _{YearsSFC+RI}	0.16	510.91	YearsSFC	2.90	27.61	<0.0001	Intercept	0.30	0.05	5.95
			RI (yr)	1.00	0.16	0.69				
GAMM _{MeanCCL+RI}	0.18	526.84	MeanCCL (cm)	1.00	51.86	<0.0001	Intercept	0.36	0.04	8.63
			RI (yr)	1.00	5.09	<0.05				
GAMM _{YearsSFC}	0.16	506.57	YearsSFC	2.93	30.27	<0.0001	Intercept	0.30	0.05	5.97
GAMM _{MeanCCL}	0.17	527.27	MeanCCL (cm)	1.00	53.65	<0.0001	Intercept	0.36	0.04	8.64
GAMM _{RI}	0.02	567.66	RI (yr)	1.00	6.39	<0.05	Intercept	0.37	0.05	7.57

Table S3. Statistical output from GAMM models to investigate the potential influence of different covariates on CAGR response of green turtles. YearSFC: year since first capture. RI: remigration interval. Edf: estimated degrees of freedom. SE: standard error.

Model	Adj r^2	AIC	Variable	Edf	F	Prob(F)	Variable	Estimate	SE	t
GAMM _{YearsSFC+RI}	0.17	609.50	YearsSFC	2.94	28.35	<0.0001	Intercept	0.35	0.06	5.99
			RI (yr)	1.00	0.17	0.68				
GAMM _{YearsSFC}	0.16	506.57	YearsSFC	2.93	30.27	<0.0001	Intercept	0.30	0.05	5.97
GAMM _{RI}	0.02	567.66	RI (yr)	1.00	6.39	<0.05	Intercept	0.37	0.05	7.57

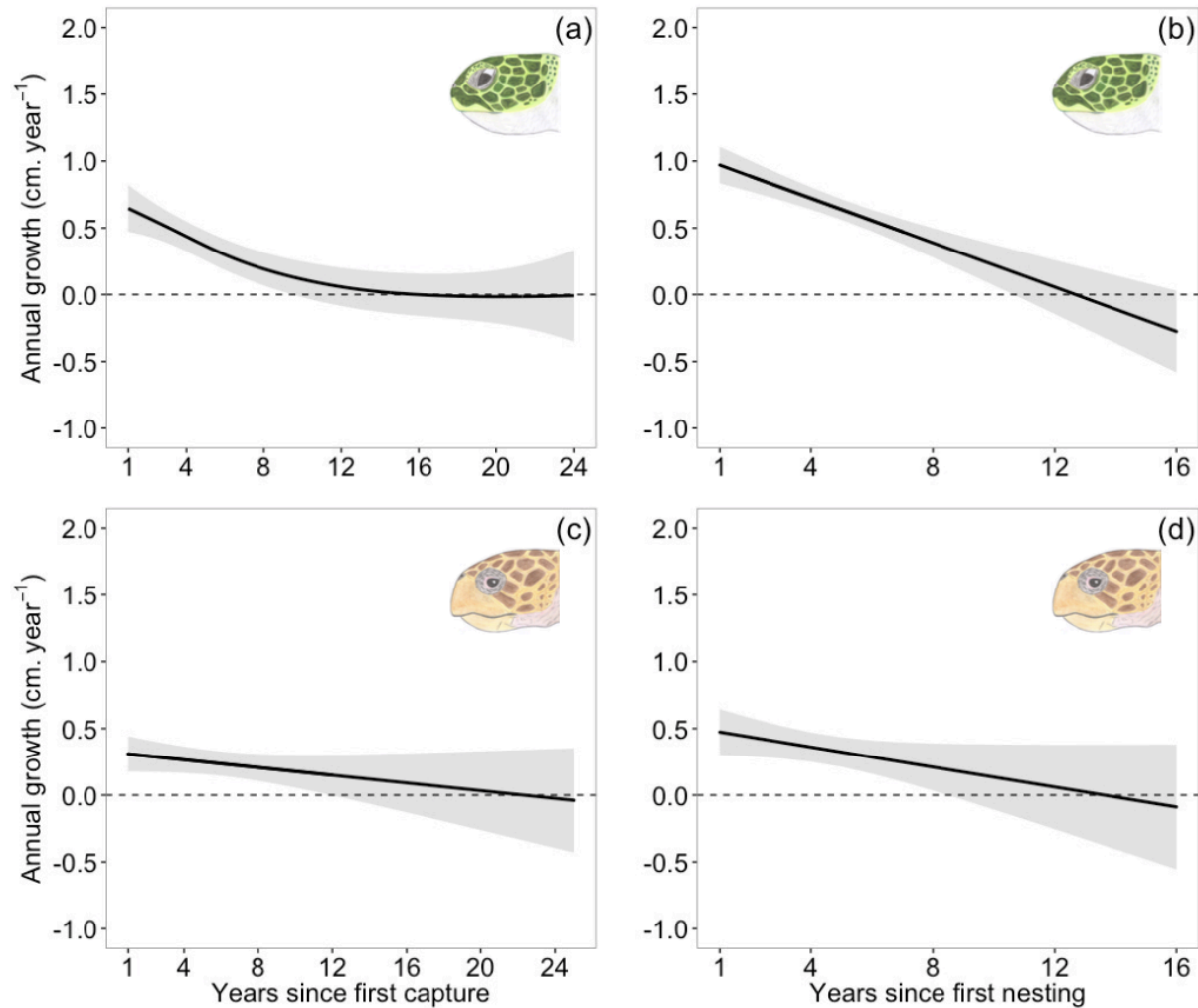


Figure S1. Graphical summary of GAMM (a) and GLMM (b-d) analyses of annual growth for green (a-b) and loggerhead (c-d) turtles for the 1992 – 2017 (a and c) and 2000 – 2017 (b and d) datasets. The response variables are shown on the y-axis, shifted by the intercept for ease of visualisation. 95% confidence intervals are shown in grey. Dashed lines represent the absence of growth.

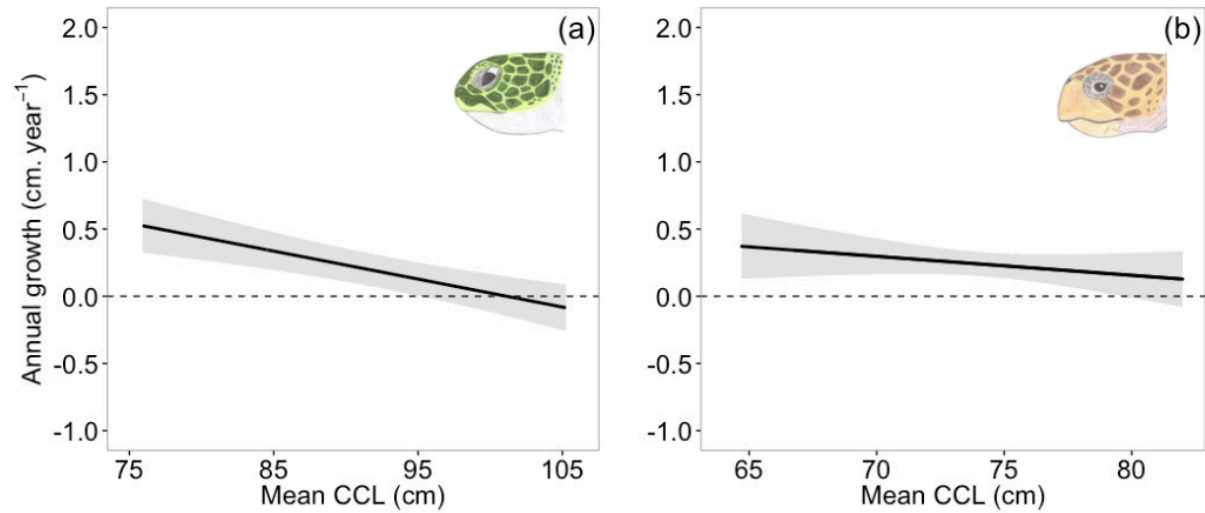


Figure S2. Graphical summary of GAMM (a) and GLMM (b) analyses for annual growth as a function of mean CCL for green (a) and loggerhead (b) turtles for the 1992 – 2017 dataset. The response variables are shown on the y-axis, shifted by the intercept for ease of visualisation. 95% confidence intervals are shown in grey. Dashed lines represent the absence of growth.