

Age and Growth of An Outbreaking *Acanthaster cf. solaris* Population within the Great Barrier Reef

M. Aaron MacNeil ^{1,2,3,*}, Karen M. Chong-Seng ², Deborah J. Pratchett ², Cassandra A. Thompson ², Vanessa Messmer ² and Morgan S. Pratchett ²

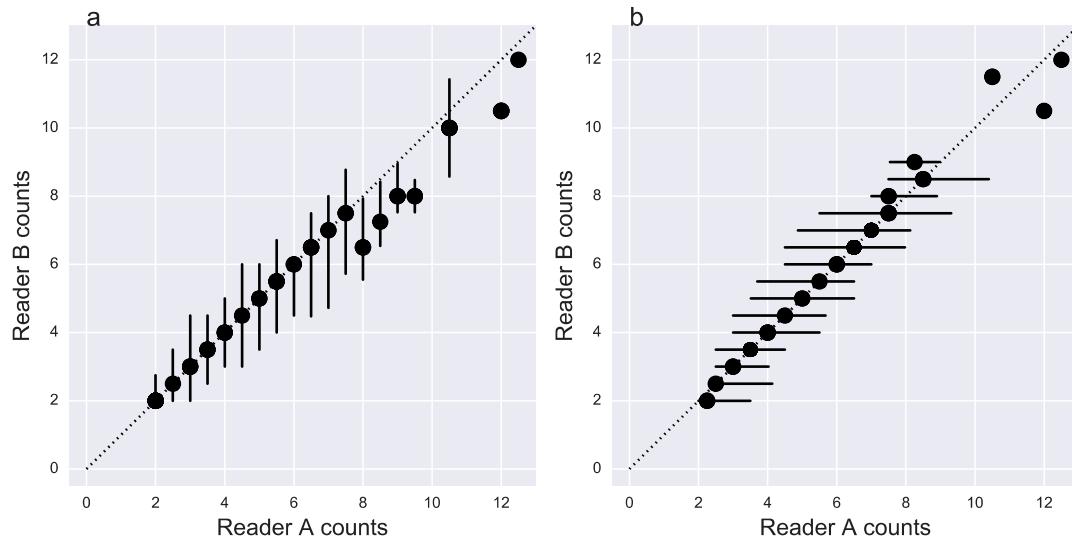


Figure S1. Inter-reader comparability for dry counts of crown-of-thorns starfish (*Acanthaster cf. planci*) spines collected from the Great Barrier Reef CoTS initiation box, 2013–2014. (a) mean (black dot) and 95% quantiles (black line) for Reader D relative to Reader K; (b) mean and 95% quantiles for Reader K relative to Reader D.

Table S1. Posterior parameter estimates for a Bayesian von Bertalanffy 3-parameter model fit to the data presented in Figure 5 of [5]. Estimates presented are the posterior median and 95% uncertainty intervals (95% highest posterior density). Model structure was as in (1), using weakly (un)-informative priors and without a reef-level structure or quality scoring.

Parameter	Median	95% UI
L_∞	565.1	[518.0, 617.3]
k	0.21	[0.17, 0.24]
L_0	0.03	[0.00, 4.35]

Table S2. Reef-specific posterior parameter estimates for a Bayesian von Bertalanffy 3-parameter model fit to data from the GBR between October 2013 and November 2014. Estimates presented are the posterior median and 95% uncertainty intervals (95% highest posterior density).

Reef	Parameter	Median	95% UI
<i>Trunk</i>			
	L_∞	332	[304, 356]
	k	0.54	[0.45, 0.69]
<i>Rib</i>			
	L_∞	314	[276, 358]
	k	0.50	[0.35, 0.69]
<i>Davies</i>			
	L_∞	391	[350, 431]
	k	0.57	[0.34, 0.76]

<i>Centipede</i>			
	L_∞	413	[358, 488]
	k	0.49	[0.31, 0.90]
<i>Bramble</i>			
	L_∞	306	[274, 327]
	k	0.64	[0.54, 0.94]
<i>Hedley</i>			
	L_∞	334	[298, 358]
	k	0.50	[0.41, 0.81]
<i>McCulloch</i>			
	L_∞	323	[308, 342]
	k	0.44	[0.39, 0.50]
<i>Elford</i>			
	L_∞	358	[340, 384]
	k	0.52	[0.41, 0.66]
<i>Arlington</i>			
	L_∞	328	[318, 340]
	k	0.62	[0.55, 0.72]
<i>Spitfire</i>			
	L_∞	301	[293, 308]
	k	1.55	[1.44, 1.73]
<i>Pickersgill</i>			
	L_∞	326	[310, 343]
	k	0.42	[0.37, 0.48]
<i>Endeavour</i>			
	L_∞	347	[326, 380]
	k	0.36	[0.31, 0.37]
<i>Emily</i>			
	L_∞	282	[271, 294]
	k	0.65	[0.57, 0.74]
<i>South Direction</i>			
	L_∞	362	[346, 384]
	k	0.48	[0.41, 0.53]
<i>North Direction</i>			
	L_∞	400	[376, 428]
	k	0.36	[0.32, 0.43]
<i>MacGillivray</i>			
	L_∞	343	[312, 385]
	k	0.44	[0.35, 0.56]
<i>Lizard</i>			
	L_∞	322	[309, 339]
	k	0.66	[0.56, 0.82]