Table 1: Indices used for staging reproductive condition and a description of the criteria for classifying mature and immature condition

Organ	Index	Description	Maturity assumption
Female Uterus	U = 1	Uniformly thin tubular structure	Immature
	U = 2	Thin, tubular structure, partly enlarged posteriorly	Immature
	U = 3	Uniformly enlarged tubular structure	Mature
	U = 4	In utero eggs present without macroscopically visible embryos present	Mature
	U = 5	In utero embryos macroscopically visible	Mature
	U = 6	Enlarged tubular structure distended	Mature
Male Clasper	C = 1	Pliable with no calcification	Immature
	C = 2	Partly calcified	Immature
	C = 3	Rigid and fully calcified	Mature

Table 2: Estimated life history parameters and standard errors for *C. limbatus* from the present study compared with those of *C. tilstoni* from previous studies in Queensland (Harry *et al.* 2013) and the Northern Territory (Stevens and Wiley 1986; Davenport and Stevens 1988) * approximate values not statistically derived

Process	Parameter	Description	*C. limbatus*		*C. tilstoni* (QLD)		*C. tilstoni* (NT)	
			Female / Both	Male	Female / Both	Male	Female / Both	Male
Growth		Model type	Von Bertalanffy		Logistic		Von Bertalanffy	
	L_∞	Asymptotic length (cm)	263.3 (6.4)	241.9 (3.6)	173.9	147.8	181.4	156.8
	K	Growth coefficient (yr^{-1})	0.1418 (0.012)	0.1565 (0.0088)	0.2676	0.3479	0.19	0.25
	L_0	Length at birth (cm)	72.77 (0.3)		64.48	62.91	59.68	59.28
	CV_L	CV length at age	0.0487 (0.0024)					
Weight	$log(\beta_1)$	Weight length coefficient	-12.34 (0.082)		-12.64		-12.26	
	β_2	Weight length exponent	3.061 (0.017)		3.12		3.06	
	σ_W	Variance	0.1363		0.09209			
Maturity	L_{50}	50 % maturity (cm)	200.2 (1.5)		124.7	119.9	120*	110*
	L_{95}	95 % maturity (cm)	216.2 (3)		125	128	130*	120*
	A_{50}	50 % maturity (yrs)	8.334 (0.26)		6.065	5.215	4*	3*
	A_{95}	95 % maturity (yrs)	9.738 (0.66)		7.534	6.98	5*	4*
	$L_{50}\prime$	50 % maternity (cm)			137		130*	
	$L_{95}\prime$	95 % maternity (cm)			137		140*	
	$A_{50}\prime$	50 % maternity (yrs)			7.102		5*	
	$A_{95}\prime$	95 % maternity (yrs)			9.293		6*	
Fecundity	β_5	Intercept / Mean	6.6 (2.7)		-5.408		3	
	β_6	Slope			0.05725			
	P_{Max}	Annual prop. pregnant	0.33 - 0.5		0.833 - 1		1	
	R	Sex ratio	1:1		1:1		1:0.924	

Table 3: Details of five pregnant female *C. limbatus* captured from northern New South Wales waters

Date	Maternal TL (cm)	No. embryos	Mean embryo TL (cm)	Comments
11 April 2010	217	7	44	3M 4F
21 April 2010	202	2	32	1M and 1 undeveloped egg
21 April 2010	246	8	48	2M 6F
21 April 2010	228	7	42	2M 5F
28 June 2009	264	9	55	4M 5F

Table 4: Comparative demographic analysis of *C. limbatus* and *C. tilstoni*. Λ is the intrinsic rate of population decrease with age (gross productivity), M is the instantaneous rate of natural mortality, r is the intrinsic rate of population increase with time (net productivity), r_0 is lifetime female reproductive output of female offspring, μ and σ^2 are the mean and variance of ages in the population in numbers, N, and biomass, B. Values presented are the mean and standard errors derived from 1000 Monte Carlo simulations.

	Sex	$\Lambda(yr^{-1})$	$M(yr^{-1})$	$r(yr^{-1})$	r_0	μ_N	σ^2_N	μ_B	σ^2_B
C. tilstoni (NT)	Female	-0.31 (0.022)	0.1 (0.021)	0.2 (0.03)	8.5 (3.3)	3.3 (0.24)	11 (1.5)	6 (0.41)	18 (2.2)
	Male	-0.33 (0.04)	0.13 (0.027)			3 (0.37)	9.4 (2.3)	5.2 (0.58)	14 (3)
C. tilstoni (QLD)	Female	-0.26 (0.012)	0.09 (0.018)	0.17 (0.022)	12 (4.9)	3.9 (0.18)	15 (1.4)	7.4 (0.41)	26 (2)
	Male	-0.29 (0.034)	0.12 (0.025)			3.5 (0.42)	12 (3.1)	6.1 (0.66)	19 (3.7)
C. limbatus	Female	-0.19 (0.011)	0.074 (0.015)	0.11 (0.019)	9.2 (4.1)	5.4 (0.33)	29 (3.6)	10 (0.58)	46 (4.8)
	Male	-0.19 (0.025)	0.081 (0.016)			5.3 (0.72)	28 (8.1)	9.5 (1.1)	42 (10)