

SUPPLEMENTARY TABLES AND FIGURES**Table S1.** Summary information for loggers deployed

Season	Location	Deployed	Recovered	Relocated? (Y/N)
2016	Fuwairit	1-Jun	14-Jul	Y
2016	Fuwairit	1-Jun	14-Jul	Y
2017	Fuwairit	27-Apr	19-Jun	Y
2017	Fuwairit	27-Apr	19-Jun	Y
2017	Fuwairit	27-Apr	27-Jun	Y
2017	Fuwairit	28-Apr	19-Jun	Y
2017	Fuwairit	28-Apr	19-Jun	Y
2017	Fuwairit	30-Apr	22-Jun	Y
2017	Fuwairit	8-May	27-Jun	Y
2017	Fuwairit	9-May	29-Jun	Y
2017	Fuwairit	9-May	28-Jun	Y
2017	Fuwairit	10-May	1-Jul	Y
2017	Ras Laffan	10-May	26-Jul	N
2017	Fuwairit	12-May	4-Jul	Y
2017	Fuwairit	13-May	28-Jun	Y
2017	Fuwairit	13-May	1-Jul	Y
2017	Fuwairit	13-May	1-Jul	Y
2017	Fuwairit	15-May	4-Jul	Y
2017	Fuwairit	16-May	3-Jul	Y
2017	Fuwairit	17-May	5-Jul	Y
2017	Ras Laffan	17-May	2-Jul	N
2017	Ras Laffan	18-May	26-Jul	N
2017	Fuwairit	20-May	9-Jul	Y
2017	Fuwairit	20-May	8-Jul	Y
2017	Fuwairit	21-May	8-Jul	Y
2017	Ras Laffan	26-May	21-Jun	N

Table S2. Climate ensemble used with weighting coefficients for each climate predictor

Climate Model	Weighting coefficients			
	TAS	T _{max}	T _{min}	SST
CanESM5	0.66	0.76	0.87	1.28
GFDL-CM4	0.34	<0.01	1.75	1.26
INM-CM4-8	0.98	1.57	1.09	0.03
INM-CM5-0	2.36	1.79	2.08	0.31
MPI-ESM1-2-HR	1.21	0.18	0.03	3.03
MPI-ESM1-2-LR	0.44	1.68	0.19	0.07

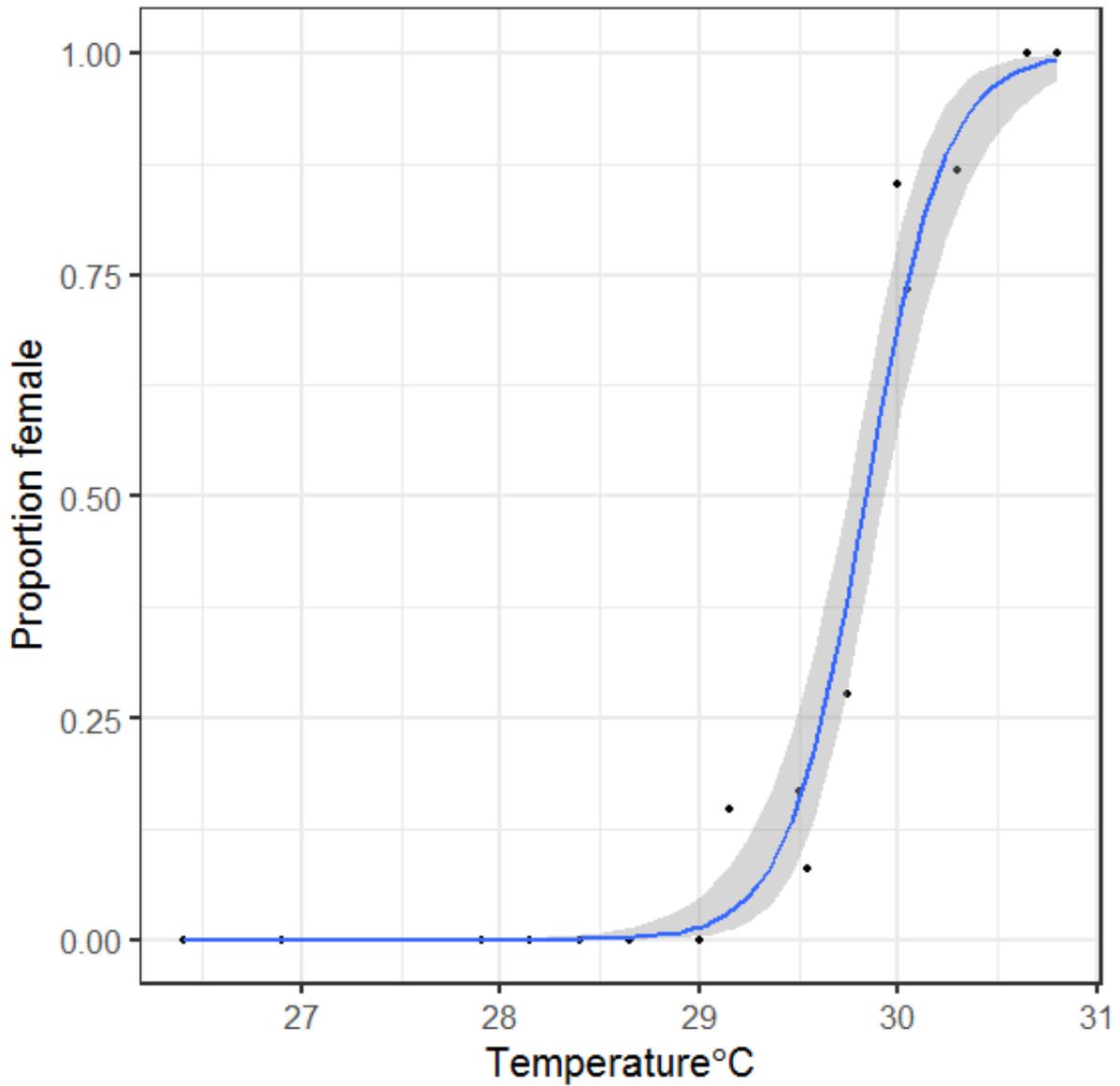


Fig. S1. Logistic regression model developed to predict sex ratio from constant temperature equivalent weighted by embryo growth (CTE_w). The observations were collated from Godfrey et al. (1999) and Mrosovsky et al. (1992)

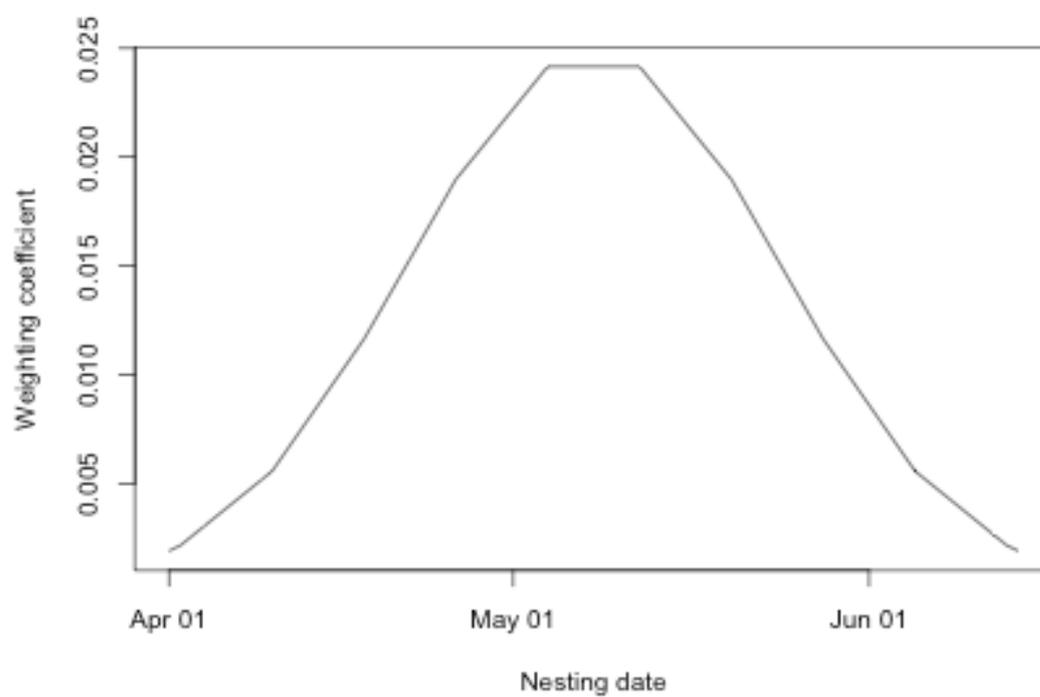


Fig. S2. Weighting coefficient applied to each unique constant temperature equivalent weighted by growth (CTE_w) to estimate annual nesting frequency and annual sex ratio