Supplementary Material

Recreational fishery discard practices influence use of tidal estuary by a large marine mesopredator

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Table S1. Summary statistics for the Dunn's Multiple Comparisons test comparing mean detection indices for smooth stingrays at each receiver.

Comparison	Z	P-values
Downstream - Mouth	0.544	0.587
Downstream - Upstream	3.618	<0.001***
Mouth - Upstream	3.074	0.002**
Downstream - Woollamia Boat Ramp	0.602	0.547
Mouth - Woollamia Boat Ramp	–0.058	0.955
Upstream - Woollamia Boat Ramp	–3.016	0.003**

Probabilities are significant at: *, $P < 0.05$; **, $P < 0.01$; ***, $P < 0.001$.

Table S2. Summary statistics of the generalised additive mixed-effects model evaluating the duration of smooth stingray visitation events in lower Currambene Creek against temporal and environmental variables.

Parametric coefficients	Estimate	s.e.	*t*-value	*P*-value
(Intercept)	0.731	0.131	5.598	<0.001***
Receiver [Upstream]	–0.545	0.041	–13.217	<0.001***
Receiver [Downstream]	–0.299	0.026	–11.586	<0.001***
Receiver [Creek Mouth]	–0.524	0.031	–16.746	<0.001***
Lunar Phase [New]	–0.044	0.037	–1.188	0.235
Lunar Phase [Waning]	0.011	0.035	0.319	0.749
Lunar Phase [Waxing]	–0.047	0.034	–1.366	0.172
Tidal Phase [Outgoing]	–0.069	0.022	–3.101	0.002**
Daily Rainfall [>40 mm]	–0.266	0.301	–0.884	0.376
Daily Rainfall [0-20 mm]	0.026	0.029	0.879	0.379
Daily Rainfall [20-40 mm]	–0.114	0.083	–1.375	0.169
Prev. Day Rainfall [>40 mm]	–0.053	0.260	–0.205	0.837
Prev. Day Rainfall [0-20 mm]	–0.014	0.028	–0.494	0.621
Prev. Day Rainfall [20-40 mm]	0.042	0.093	0.453	0.650
Water Temperature	–0.024	0.006	–4.048	<0.001***
Smooth terms	**d.f.$_e$**		***F***	***P*-value**
s(DOW) : Receiver [Woollamia]	1.660		0.998	0.039*
s(DOW) : Receiver [Upstream]	0.003		0.000	0.711
s(DOW) : Receiver [Downstream]	1.134		0.450	0.130
s(DOW) : Receiver [Creek Mouth]	0.100		0.020	0.370
s(hour) : Receiver [Woollamia]	5.218		3.997	<0.001***
s(hour) : Receiver [Upstream]	1.932		0.335	0.010*
s(hour) : Receiver [Downstream]	3.460		2.602	<0.001***
s(hour) : Receiver [Creek Mouth]	1.278		0.133	0.095
s(Transmitter ID)	11.382		21.696	<0.001***
n	8160			
Deviance explained	11.3%			

hour, hour of the day; DOW, day of the week; d.f.$_e$, effective degrees of freedom. Probabilities are significant at: *, $P < 0.05$; **, $P < 0.01$; ***, $P < 0.001$. The model contained a first-order auto-regression structure to account for temporal autocorrelation.