

Supporting Information

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Table S1. A summary of the more commonly stated aims for studies of intertidal stranded debris, the percentage of papers which included that aim, with selected citations.

Stated aims of the study	% of papers	Selected citations
Quantifying amounts	81	Abu-Hilal & Al-Najjar ⁵⁴ ; Acha <i>et al.</i> ⁷⁷ ; Ariza <i>et al.</i> ⁷⁶
Determining the composition	55	Acha <i>et al.</i> ⁷⁷ ; Abu-Hilal & Al-Najjar ⁵⁴
Identifying sources	29	Araújo & Costa ¹⁰³ ; Browne <i>et al.</i> ¹⁹ ; Topçu <i>et al.</i> ⁹⁷
Measuring temporal trends	29	Bowman <i>et al.</i> ⁹² ; Ribic <i>et al.</i> ^{57,58,78}
Measuring spatial variation	27	Thornton & Jackson ¹¹² ; Araújo & Costa ¹⁰³ ; Claessens <i>et al.</i> ²⁴
Acquiring baseline data	15	Gilligan ⁹⁴ ; Ganesapandian <i>et al.</i> ⁷¹ ; Debrot <i>et al.</i> ^{73,75}
Advising management	5	Cordeiro & Costa ⁷⁰ ; Alkalay <i>et al.</i> ¹²⁹
Conservation; public awareness	5	Kusui & Noda ¹³⁴ ; Bravo <i>et al.</i> ⁵⁶ ; Roosevelt <i>et al.</i> ¹¹³

Table S2. A summary of the more common reasons given for selecting particular sites for the study of intertidal stranded debris, the percentage of papers stating that reason, with selected citations.

Selection of study sites	% of papers	Selected citations
No reasons given	45	Caulton & Macogni ⁷⁹ ; Bowman <i>et al.</i> ⁹² ; Gabrielides <i>et al.</i> ⁹⁶
Stratified to test hypotheses	13	Browne <i>et al.</i> ¹³ ; Debrot <i>et al.</i> ⁴¹ ; Frost & Cullen ¹²³
To be representative of the coast	18	Jóźwiak ²¹ ; Bravo <i>et al.</i> ⁵⁶ ; Evans <i>et al.</i> ¹¹⁷
Their relative isolation	12	Edyvane <i>et al.</i> ²² ; Scott ⁶⁴ ; Garrity & Levings ¹¹⁹
Different amounts of usage by people	3	Santos <i>et al.</i> ⁶⁰ ; Araújo & Costa ¹⁰³ ; Frost & Cullen ¹³²
Ecological significance	4	Singare ⁷² ; Costa <i>et al.</i> ¹⁰² ; Morishige <i>et al.</i> ¹²²

Table S3. A summary of the more common methods sampling stranded intertidal debris, the percentage of papers stating that reason, with selected citations.

Methods of sampling	% of papers	Selected citations
Sampled entire site	13	Williams & Tudor ¹⁵ ; Edyvane <i>et al.</i> ²² ; Walker <i>et al.</i> ⁸¹
Sampled vertical transects	36	
• Start unspecified		Slip & Burton ¹⁴⁰
• Start at low tidal level		Santos <i>et al.</i> ⁶⁰ ; Merrell ⁹¹ ; Gabrielides <i>et al.</i> ⁹⁶
• Start at mid-tidal level		Convey <i>et al.</i> ¹⁴¹
• Start at high-tidal level		Podolsky ⁶⁴
• End unspecified		Slip & Burton ¹⁴⁰
• End at top of beach		Gabrielides <i>et al.</i> ⁹⁶ ; Abu-Hilal & Al-Najjar ⁵⁴
• End at recent high tide mark		Dixon & Cooke ⁵⁸ ; Acha <i>et al.</i> ⁷⁷
• End at extreme high tide mark (storm/drift line)		Merrell ⁹¹ ; Gilligan <i>et al.</i> ⁹⁴ ; Whiting ⁴⁴
• End in vegetation above top of beach		Edyvane <i>et al.</i> ²¹ ; Willoughby <i>et al.</i> ⁴⁰ ; Frost & Cullen ¹³²
Sampled strandlines	16	
• Single strandlines		Dixon & Cooke ⁵⁸ ; Willoughby ⁴⁶ ; Ganesapandian <i>et al.</i> ⁷¹
• Multiple strandlines		Bowman <i>et al.</i> ⁹² ; Velander & Macogni ⁹³
Sampled belt transects parallel to the shore	4	
• Single, at a strandline		Williams & Simmons ⁶² ; Oigman-Pszczol & Creed ¹⁰⁷
• Unknown distance above high tide mark		Oigman-Pszczol & Creed ¹⁰⁷
• Multiple transects at different heights		Caulton & Mocogni ⁷⁹ ; Thornton & Jackson ¹¹² ; Cunningham & Wilson ¹³⁸
Quadrats or cores	21	
• In vertical transects		Thornton & Jackson ¹¹² ; Bravo <i>et al.</i> ⁵⁶
• In belt transects		Evans <i>et al.</i> ¹¹⁷ ; McDermid & McMullen ¹¹⁵ ; Browne <i>et al.</i> ¹³
• Randomly in site		Kusui & Noda ¹³⁴ ; Cordeiro & Costa ⁷⁰ ; Smith ⁹⁸

Table S4. A summary of the temporal scales used to measure changes in intertidal stranded debris, the percentage of papers using those scales, with selected citations.

Temporal scales	% of papers	Selected citations
No temporal replication; 1 time of sampling	36	Haynes ⁶⁹ ; Debrot <i>et al.</i> ^{73,75} ; Evans <i>et al.</i> ¹¹⁷ ;
Sampled for 1 year or less	40	Golik & Gertner ¹⁴² ; Araújo & Costa ¹⁰³ ; Frost & Cullen ¹³²
Samples for more than 1 year	38	Edyvane <i>et al.</i> ²² ; Bowman <i>et al.</i> ⁹² ; Araújo & Costa ¹⁰³
Intervals from days to a fortnight	14	Vauk & Schrey ⁴² ; Ariza <i>et al.</i> ⁷⁶
Interval of a month	25	Ribic <i>et al.</i> ⁵⁸ ; Abu-Hilal & Al-Najjar ⁵⁴ ; Otley & Ingham ⁸²
Interval of 3 months	5	Viehman <i>et al.</i> ⁷⁴ ; Schultz <i>et al.</i> ³⁴ ; Thiel <i>et al.</i> ¹⁰¹
Interval of 6 months	5	Araújo & Costa ¹⁰³ ; Widmer & Hennemann ¹⁰⁶ ; Williams & Tudor ¹¹⁰
Interval of a year or more	15	Edyvane <i>et al.</i> ²² ; Whiting ⁴⁴ ; Abu-Hilal & Al-Najjar ⁵⁴

Table S5. A summary of the types of data collected to measure changes in intertidal stranded debris, with selected citations.

Amounts of debris	Selected citations
Anecdotal	Board ¹⁰⁵ ; Saleh ¹⁴³
Qualitative assessment	Alkaly <i>et al.</i> ¹²⁹ ; Araújo & Costa ¹⁰³ ; Ariza <i>et al.</i> ⁷⁶
Semi-quantitative measures	Shiber ⁸⁵ ; Santos <i>et al.</i> ⁸⁸
Counts per unit area	Ariza <i>et al.</i> ⁷⁶ ; Acha <i>et al.</i> ⁷⁷ ; Araújo & Costa ¹⁰³
Counts per length of shore	Claereboudt ³⁹ ; Corbin & Singh ⁴³
Count per site or summed over sites	Benton ⁵⁹ ; Araújo & Costa ¹⁰³ , or totalled over sites (Dixon & Cooke ⁶⁶)
Mass per unit area	Cordeiro & Costa ⁷⁰ ; Merrell ⁹¹
Mass per length of shore	Madzena & Lasiak ⁴⁰ ; Thiel <i>et al.</i> ¹⁰¹
Size-frequencies of debris	Madzena & Lasiak ⁴⁰ ; Viehman <i>et al.</i> ⁷⁴
Relative proportions of types of debris	Wade <i>et al.</i> ⁹⁰ ; Zhou <i>et al.</i> ¹³⁰ ; Thiel <i>et al.</i> ¹⁰¹