Facultative cleaning behaviour of juvenile *Diplodus sargus* (Sparidae) and its ecological role in marine temperate waters

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Supplement 2.

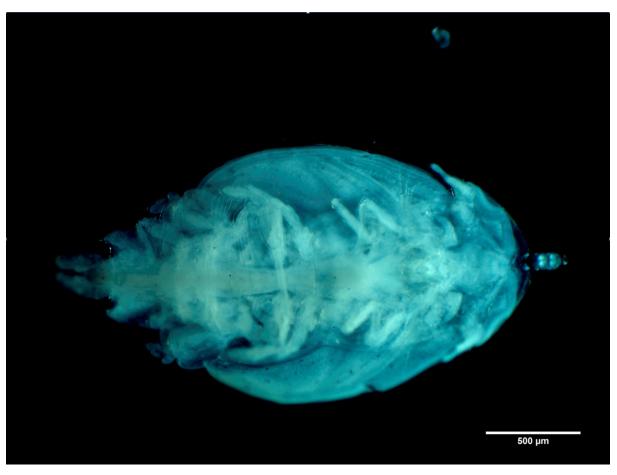


Fig. S1. Adult *Lepeophtheirus* sp. (Caligidae) identified in the stomach contents of a juvenile *D. sargus*.

Table S1. Summary of GLM results for the frequency of cleaning events according to environmental variables and time of the day. IRR: Incident Rate Ratios; SE: Standard Error.

Predictor Variables	Estimate	IRR	SE	z–value	p-value
Intercept	-1.114	0.328	0.437	-2.547	0.011
Water Temperature	0.142	1.153	0.019	7.414	< 0.001
Wave Period	0.080	1.083	0.016	5.020	< 0.001
Wind	0.089	1.093	0.030	2.971	0.003
Moon Phase: F-C	-0.035	0.966	-0.035	0.145	0.999
Moon Phase: N-C	0.094	1.098	0.146	0.643	0.982
Moon Phase: W-C	-0.334	0.716	0.134	-2.482	0.093
Moon Phase: N-F	0.128	1.137	0.164	0.782	0.957
Moon Phase: F-W	0.299	1.349	0.165	1.809	0.381
Moon Phase: N-W	0.427	1.533	0.147	2.906	0.029
Period: Aft-Morn	-0.599	0.550	0.116	-5.163	< 0.001
Period: Noon-Morn	-0.396	0.673	0.105	-3.782	0.001
Period: Noon-Aft	0.202	1.224	0.106	1.901	0.325

Table S2. (A) Frequency of nips by cleaners of different sizes targeting the clients' head, flank, or tail; (B) ACTUS2 statistical simulations (units per 1000 data sets) ($\chi^2 = 55.52$, n = 2141, df = 6, p < 0.001). In each cell, the significance of high counts is presented above the significance of low counts. Significant high counts and significant low counts (p < 0.05) are indicated by an asterisk and an arrow to clarify interpretation.

(A)

Cleaner	Client		
	Head	Flank	Tail
0.0-2.5 cm	89	99	119
2.5-5.0 cm	347	373	459
5.0–7.5 cm	254	189	136
7.5–10.0 cm	36	18	22

(B)

Cleaner	Client		
	Head	Flank	Tail
0.0–2.5 cm	948	468	114
	69	590	907
2.5–5.0 cm	998	506	4* (↑)
2.5–5.0 CIII	2*(↓)	528	998
5 0–7 5 cm	0 * (↑)	351	1000
3.0-7.3 CIII	1000	686	$0*(\downarrow)$
7.5–10.0 cm	43* (↑)	930	787
7.5–10.0 cm	975	120	292

Table S3. (A) Positive and negative reaction to nips of clients of different sizes; (B) ACTUS2 statistical simulations (units per 1000 data sets) ($\chi^2 = 14.95$, n = 1651, df = 3, p < 0.001). In each cell, the significance of high counts is presented above the significance of low counts. Significant high counts and significant low counts (p < 0.05) are indicated by an asterisk and an arrow to clarify interpretation.

(A)

Client	Reaction	
	Positive	Negative
10.0–20.0 cm	65	48
20.0-30.0 cm	552	266
30.0–40.0 cm	452	162
>40.0 cm	78	28

(B)

Client	Reaction		
	Positive	Negative	
10.0–20.0 cm	964	20*(↑)	
	47*(↓)	986	
20.0–30.0 cm	920	78	
20.0–30.0 cm	87	935	
30.0–40.0 cm	86	977	
30.0–40.0 CIII	922	31*(↓)	
>40.0 cm	205	724	
-40.0 cm	830	331	