

## Drivers of herbivory on coral reefs: species, habitat and management effects

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### Supplementary Text 1. Methods for estimating flight initiation distance (FID) at each site.

FID was measured for at least 7 individuals of both target species at each site. To estimate FID, individual fish which were feeding or moving slowly across the reef, were approached along the bottom at a slow speed, perpendicular to their direction of travel. At the moment the fish fled from the diver (flight was defined as an increase in speed or change in direction), a marker was dropped in line with the diver's head, and a second marker dropped at the location of the fish at the moment of flight (following Januchowski-Hartley et al. 2011). The distance between these two markers was measured.

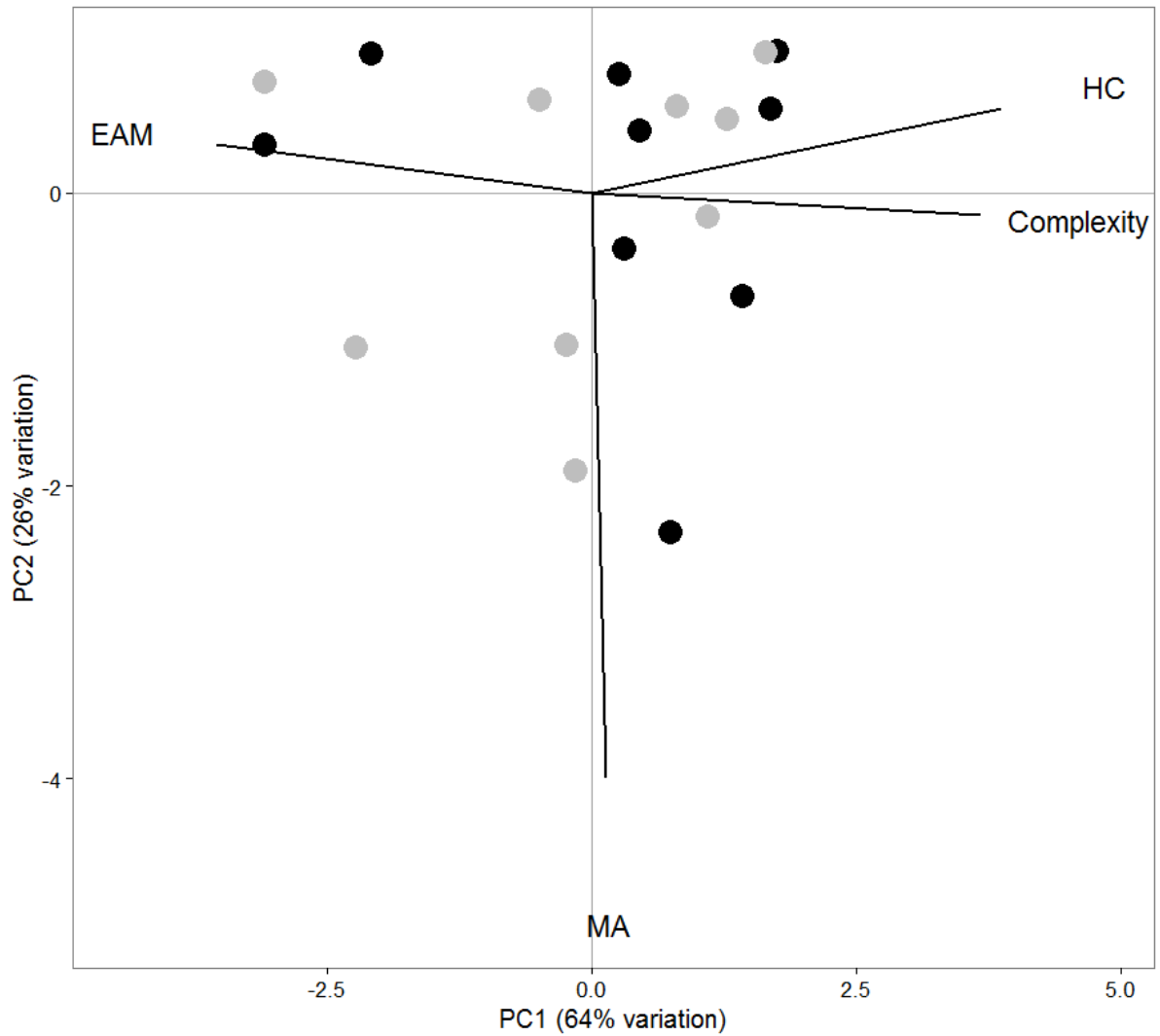
**Table S1.** Number of behavioural observations made for each species at each site.

Site	Flight initiation distance		Inter-foray distance		Grazing rate	
	<i>C. bleekeri</i>	<i>S. niger</i>	<i>C. bleekeri</i>	<i>S. niger</i>	<i>C. bleekeri</i>	<i>S. niger</i>
Apo Fished	8	8	50	49	40	40
Apo Reserve	10	10	36	41	39	39
Kookoos	12	11	40	31	37	33
Cangmunag	11	9	42	38	41	43
Solangon	10	11	39	32	40	36
Tubod Fished	11	10	35	38	31	35
Tubod Reserve	11	11	43	40	32	35
Sumilon Fished	10	7	32	31	32	32
Sumilon Reserve	10	10	37	37	42	41
<b>TOTAL</b>	<b>93</b>	<b>87</b>	<b>354</b>	<b>337</b>	<b>334</b>	<b>334</b>

Januchowski-Hartley FA, Graham NAJ, Feary DA, Morove T, Cinner JE (2011) Fear of fishers: human predation explains behavioral changes in coral reef fishes. Plos One 6:e22761

**Table S2.** Community and benthic characteristics of each site. Values are means  $\pm$ SE.

Site	Zone	HC (%)	SE	EAM (%)	SE	MA (%)	SE	Complexity	SE	PC1	PC2	Herbivores (gm <sup>-2</sup> )	SE	Large Piscivores (gm <sup>-2</sup> )	SE
Apo Fished	Crest	60.67	6.12	14.00	4.58	1.00	0.00	4.17	0.17	1.74	0.97	40.13	5.91	4.65	2.82
Apo Fished	Slope	59.33	4.70	13.67	3.84	1.00	0.00	4.00	0.29	1.64	0.96	17.86	4.77	25.17	12.04
Apo Reserve	Crest	1.75	0.48	58.25	4.40	4.25	1.25	1.63	0.24	-3.09	0.33	59.73	18.67	4.60	2.15
Apo Reserve	Slope	7.50	1.55	42.75	4.84	11.50	2.47	1.63	0.13	-2.23	-1.06	63.05	26.15	3.40	1.19
Kookoos	Crest	35.00	2.12	24.00	1.41	18.25	4.97	4.38	0.13	0.73	-2.31	28.18	9.17	7.06	4.26
Kookoos	Slope	28.75	2.17	23.50	3.18	16.00	2.04	2.88	0.24	-0.16	-1.90	32.16	11.72	13.84	6.41
Cangmunag	Crest	65.00	1.08	20.75	1.65	3.50	0.87	4.38	0.13	1.69	0.57	9.13	0.77	0.00	0.00
Cangmunag	Slope	60.50	3.80	19.00	2.97	3.75	0.63	3.63	0.24	1.27	0.51	9.93	0.90	0.57	0.37
Solangon	Crest	43.25	4.21	26.00	3.81	8.25	1.11	3.25	0.14	0.30	-0.37	21.70	10.28	1.65	0.66
Solangon	Slope	34.75	3.50	19.25	3.90	11.50	3.33	2.00	0.20	-0.24	-1.03	12.75	4.67	1.32	0.89
Tubod Fished	Crest	55.67	7.84	13.33	4.37	10.00	2.00	3.67	0.33	1.42	-0.70	32.68	11.74	1.10	1.10
Tubod Fished	Slope	52.00	8.62	16.33	2.33	7.00	1.53	3.50	0.29	1.09	-0.16	29.02	8.74	2.60	0.97
Tubod Reserve	Crest	46.33	6.89	29.00	5.20	4.00	2.00	3.67	0.17	0.45	0.43	32.13	1.75	8.03	5.91
Tubod Reserve	Slope	43.00	2.89	20.33	2.40	2.67	1.20	3.83	0.17	0.80	0.59	20.70	9.36	25.22	13.87
Sumilon Fished	Crest	4.25	0.85	26.50	5.48	0.00	0.00	0.75	0.14	-2.09	0.95	8.92	3.11	0.39	0.39
Sumilon Fished	Slope	6.75	1.49	51.50	4.73	2.00	0.00	0.75	0.25	-3.09	0.76	16.00	4.37	0.77	0.45
Sumilon Reserve	Crest	45.50	8.51	32.25	6.61	2.00	1.00	3.63	0.24	0.26	0.81	38.38	3.29	22.62	11.80
Sumilon Reserve	Slope	29.25	1.65	34.75	3.57	2.50	1.50	3.25	0.32	-0.50	0.64	19.41	4.78	43.75	18.63



**Figure S1.** Principle component analysis of benthic variables. Circles represent zones within sites: black-crest; grey-slope. MA macroalgae, HC hard coral, EAM epilithic algal matrix.