

## Herbivory drives kelp recruits into ‘hiding’ in a warm ocean climate

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Marine Ecology Progress Series 536: 1–9 (2015)

### Supplement.

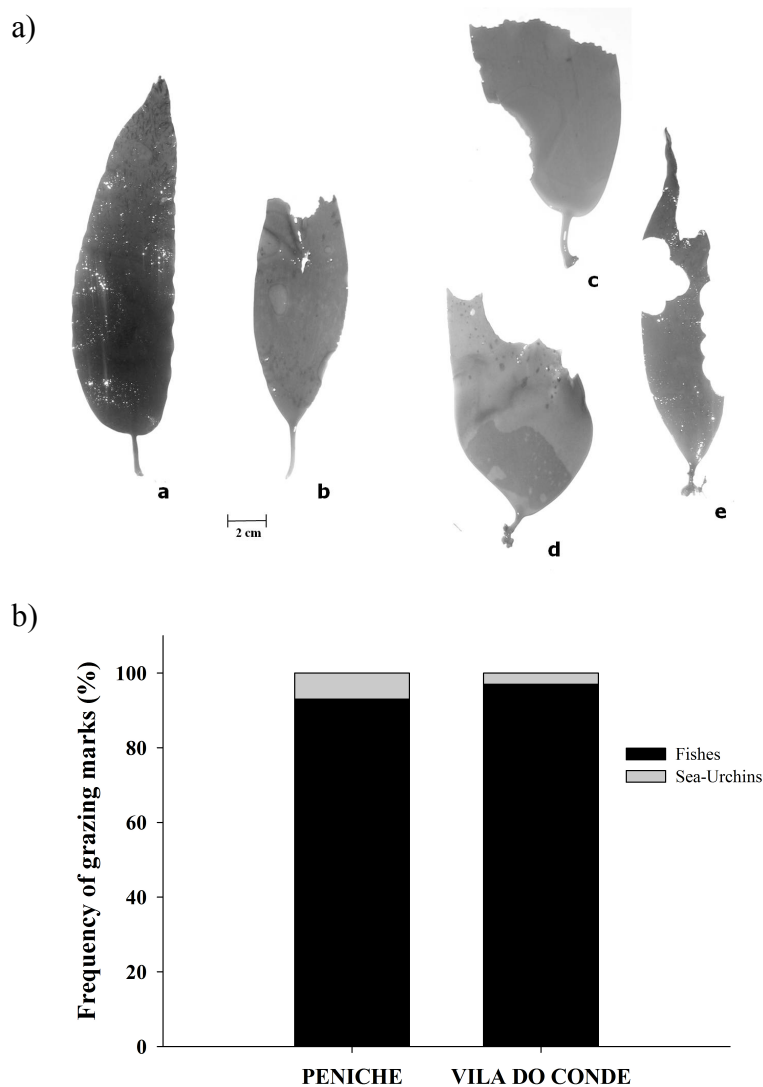


Fig. S1. a) Examples of different grazing marks on kelp recruits. *a* shows a kelp recruit without grazing marks, *b* and *c* show classic signs of sea urchin grazing with the irregular serrated bite marks, whereas *d* and *e* show clear crescent shaped bite marks indicative of fish herbivory. b) Total number of grazing marks on kelp recruits by fishes and sea-urchins

Table S1. Trophic guilds (inv-invertebrate feeders, ma-macrocarnivores, om- omnivores, her-herbivorous; according to Henriques et al. 2013 and www. fishbase.org) and abundances (ind 100 m<sup>-2</sup>, mean, SD, n = 25) of fish species at each region and year.

Species	Trophic guild	PENICHE				VILA DO CONDE			
		2012		2013		2012		2013	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
<i>Boops boops</i>	om	2.18	5.14	0.12	0.60	0	0	0.24	0.59
<i>Coris julis</i>	inv	0.12	0.44	0.64	2.80	0	0	0.40	1.60
<i>Centrolabrus exoletus</i>	inv	0.16	0.80	0	0	0	0	0	0
<i>Ctenolabrus rupestris</i>	inv	0.08	0.28	0.08	0.28	0.72	2.13	0.56	0.64
<i>Dicentrarchus labrax</i>	ma	0	0	0	0	0.28	0.84	0.08	0.40
<i>Diplodus sargus</i>	om	0.24	0.83	12.60	19.58	0.40	1.41	0	0
<i>Diplodus vulgaris</i>	om	8.80	14.04	27.68	13.75	0.92	2.98	0.28	1.80
<i>Gobiomusculus flavescens</i>	inv	0.32	0.69	0	0	0	0	0	0
<i>Labrus bergylta</i>	inv	1.92	2.10	1.84	1.07	0.40	0.58	1.68	1.86
<i>Labrus mixtus</i>	inv	0	0	0	0	0.08	0.28	0	0
<i>Labrus spp.</i>	inv	0	0	0	0	0.72	0.68	0	1.02
<i>Labrus viridis</i>	inv	0	0	0	0	0.04	0.20	0	0
<i>Oblada melanura</i>	om	0.04	0.20	0	0	0	0	0	0
<i>Parablennius pilicornis</i>	inv	0.32	1.03	0	0	0	0	0.24	0.59
<i>Pollachius pollachius</i>	inv	1.04	3.13	0.48	1.26	2.56	8.00	0	10.72
<i>Sarpa salpa</i>	her	0	0	1.60	5.54	0	0	0	0
<i>Serranus cabrilla</i>	ma	0	0	0.08	0.28	0	0	0	0
<i>Symphodus spp.</i>	inv	1.88	1.72	3.28	2.51	0.40	0.65	0.24	0.66
<i>Trisopterus luscus</i>	inv	0.12	0.44	0.36	0.57	4.76	10.87	0.56	1.04