

Luis R. Vinuela, Bruce A. Menge, Diego Ruiz, and Daniel M. Palacios. 2014. Oceanographic and climatic variation drive top-down/bottom-up coupling in the Galápagos intertidal meta-ecosystem. *Ecological Monographs* 84:411–434. <http://dx.doi.org/10.1890/13-0169.1>

APPENDIX A. Figures showing wave action, consumer densities, and landscape pictures showing the intertidal during the warm and cool phase.

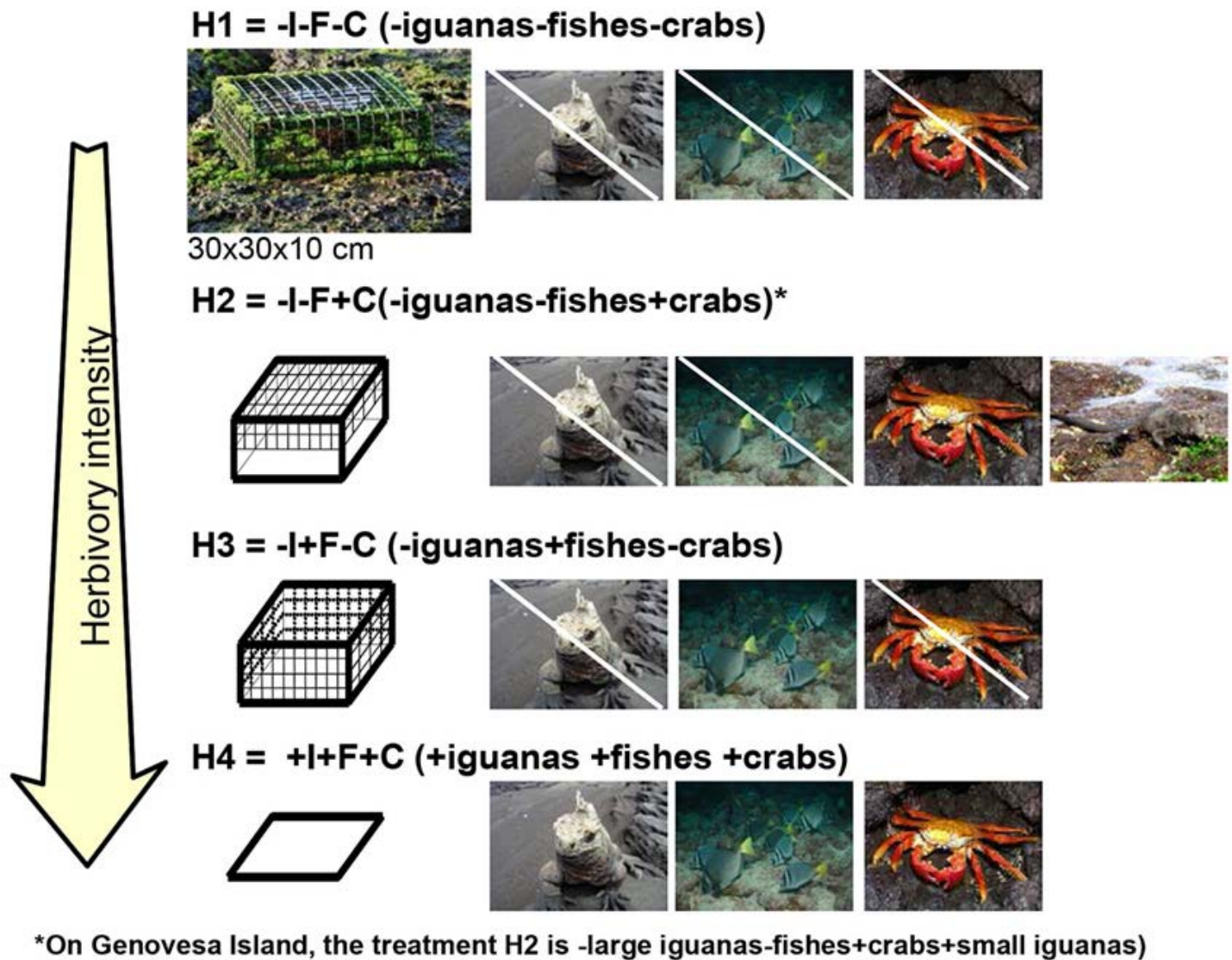


FIG. A1. Experimental design. Four different types of cages were used to experimentally manipulate the access of different group of consumers from no macro-herbivores present (-I-F-C) to all macro-herbivores present (+I+F+C). Cages also excluded sea turtles, which are algae grazers, but their relative impact is likely to be considerably less than iguanas. Treatment H2 also allows access to small iguanas, which are found only on Isla Genovesa. Photos: L. Vinuela.

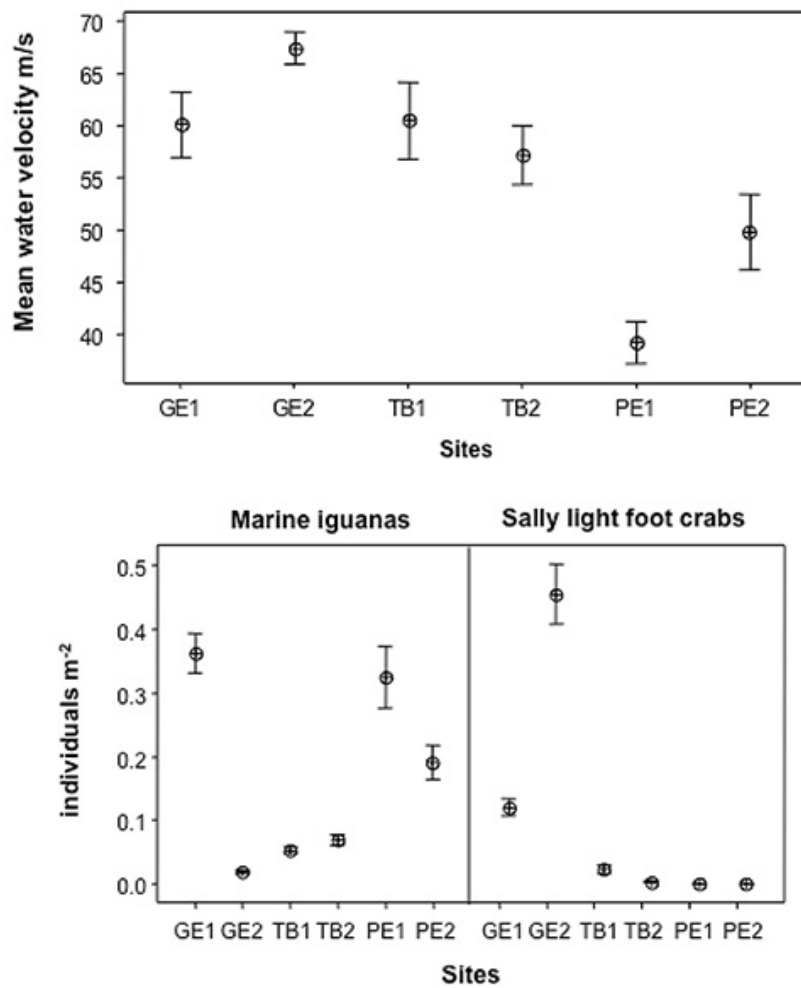


FIG. A2. Top: Maximum wave action (mean  $\pm$  1 SE) measured at each site. Bottom: Densities (mean  $\pm$  1 SE) of marine iguanas and sally light foot crabs (*Grapsus grapsus*).



FIG. A3. Site at Santa Cruz (MP), showing mostly barren rock during the warm phase of the experiment. Photo: L.

Vinueza.

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FIG. A4. Site at Santa Cruz (MP), showing dense cover of *Ulva* sp. during the cool, La Niña phase of the experiment and a marine iguana. Photo: L. Vinueza.

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