Table 1. Annual net primary production rates in selected coastal Long Term Ecological Research and oceanic sites.

Site	Primary Producer(s)	Rate (gC m ⁻² yr ⁻¹)	References
Palmer, Antarctica (PAL)	Phytoplankton (coastal 1993-2012)	180	Vernet et al. (2008)
	Macroalga Himantothallus grandifolius	16-56	Wiencke and Amsler (2012)
California Current Ecosystem (CCE)	Phytoplankton (coastal, upwelling, 1984-2013)	390	R. Goericke*
Bermuda Atlantic Time Series (BATS)	Phytoplankton (open sea)	157	Lomas et al. (2013)
Florida Coastal Everglades (FCE)	Seagrasses, macroalgae, periphyton, mangroves	853–1,166	Herbert and Fourqurean (2009); L. Collado-Vides, V.H. Rivera, J. Fourqurean*; Castañeda-Moya et al. (in press)
Georgia Coastal Ecosystems (GCE)	Marsh grasses (aboveground)	675	Pennings et al. (2012)
	Phytoplankton	280	Pennings et al. (2012)
Plum Island Ecosystems, MA (PIE)	Marsh grass (aboveground)	350	A. Giblin, J. Morris*
Santa Barbara Coastal, CA (SBC)	Kelp forest	1,200	Reed et al. (2008); Harrer et al. (in press)
Virginia Coast Reserve (VCR)	Seagrasses and marsh grass (aboveground)	300-450	Kirwan et al. (2012); K. McGlathery*

^{*} personal communications, 2013



Figure 5. Some exemplary large organisms of the western Antarctic Peninsula (WAP). (a) The overstory brown macroalga Cystosphaera jacquinotii, which can co-dominate with other large brown algae in benthic communities along the WAP. The spherical structures are gas-filled floats that allow the alga to rise two or more meters off the bottom. The oblong structures are reproductive elements. Photo by C.D. Amsler. (b) Adult Antarctic krill Euphausia superba. The green color is from phytoplankton in the gut. Photo by A. McDonnell. (c) Adult Adélie penguin Pygoscelis adeliae and a two week-old chick at Torgersen Island, one kilometer from Palmer Station. Photo by W. Fraser