Shore Shapers: Introducing children and the general public to biogeomorphological processes and geodiversity

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Coastal processes shape the coast into a variety of eye-catching and enticing landforms that attract people to marvel at, relax and enjoy coastal geomorphology. Field guides to explain these processes (and the geodiversity that results) to the general public and children are few and far between. In contrast, there is a relative wealth of resources and organised activities introducing people to coastal wildlife, especially on rocky shores. These biological resources typically focus on the biology and climatic controls on their distribution, rather than how the biology interacts with its physical habitat. As an outcome of two recent rock coast biogeomorphology projects (www.biogeomorph.org/coastal/coastaldefencediversity and www.biogeomorph.org/coastal/bioprotection), we produced the first known guide to understanding how biogeomorphological processes help create coastal landforms. The ‘Shore Shapers’ guide (www.biogeomorph.org/coastal/shoreshapers) is designed to: a) bring biotic-geomorphic interactions to life and b) introduce some of the geomorphological and geological controls on biogeomorphic processes and landform development. The guide provides scientific information in an accessible and interactive way – to help sustain children’s interest and extend their learning. We tested a draft version of our guide with children, the general public and volunteers on rocky shore rambles using social science techniques and of 74 respondents, 75.6% were more interested in understanding how rock pools (i.e. coastal landforms) develop after seeing the guide. Respondents’ opinions about key bioprotective species also changed as a result of seeing the guide – 58% of people found barnacles unattractive before they saw the guide whilst 36% of respondents were more interested in barnacles after seeing the guide. These results demonstrate that there is considerable interest in more educational materials on coastal biogeomorphology and geodiversity.