

Review of: "Evaluating Hydrologic, Geomorphic, and Vegetation Parameters to Assess Natural, Living, and Hardened Shorelines along the Northern Gulf of Mexico"

Agustín Quesada

Potential competing interests: No potential competing interests to declare.

The study is indeed fascinating and innovative, particularly due to its well-developed methodology and the incorporation of a multidisciplinary approach. However, there are several significant modifications that should be considered to enhance its overall quality and impact:

The abstract should provide a comprehensive characterization of the northern gulf, including essential parameters such as tide amplitude, wave height, storm surge, and other relevant factors.

The language used in the text is somewhat colloquial. For instance, instead of saying "...so vegetation can take root..." we could use "vegetation establishment." Similarly, rather than stating "...endanger many shorelines..." we could specify where and how these shorelines are affected. Moreover, consider using "reduce erosion" or "mitigate erosion" instead of "combat erosion."

The term "Natural shorelines" might not be the best way to express the concept of pristine or non-directly modified coasts. Firstly, it implies that other types of shorelines are not part of nature, which may not be accurate. I suggest introducing the concepts of sociogeomorphology or Anthropocene coast in the introduction. Secondly, acknowledging that all shorelines are either directly or indirectly impacted by human activities is crucial. If you prefer to retain the term "Natural Shorelines," consider adding a brief disclaimer to address this topic.

The study's goal should be moved to another subtitle, as it is currently placed under "Living Shoreline."

Figure 1 requires improvement using QGIS or another map editor. Specifically, the scale and north indicators are too small in the upper images. Additionally, the lower image should include six rectangles to show the location of each place in Figure 2.

The term "strata" should be replaced with "sections" or "horizons" since these core sections are not considered strata in the formal sedimentology nomenclature.

The data analysis section should be moved up to the hydrological methods part for a more logical flow.

It appears that sites A and B are the only ones suitable for an internal comparison between NS, LS, and HS due to their unique characteristics. For the other sites, their exposure to major wave energy makes internal comparison unfeasible.



Field photographs are necessary for each site to better understand the living shoreline strategies employed.