

Review of: "Comparison of Vegetation Community Diversity, Biomass, and Sediment Properties among Constructed and Reference Salt Marshes at Deer Island, Mississippi, U.S.A."

María Elizabeth Carbone¹

¹ Universidad Nacional del Sur

Potential competing interests: No potential competing interests to declare.

COMPARISON OF VEGETATION COMMUNITY DIVERSITY, BIOMASS, AND SEDIMENT PROPERTIES AMONG CONSTRUCTED AND REFERENCE SALT MARSHES AT DEER ISLAND, MISSISSIPPI, U.S.A.

Dear Editorial, the article is correctly presented, it covers a crucial problem to remedy degraded coastal ecosystems. Figures could also be incorporated to complement the interpretation of results that were presented in this review.

The article is very interesting; it addresses a very current topic on the remediation of degraded natural environments from dredged sediments. As the authors establish, there are not many works on these topics and new experiences are being evaluated. It is very important all the characterization carried out from all the environmental variables covered to measure the two sites used in this study. The different technique for the restoration of marshes and trying to obtain the original environmental quality reveals a serious problem that occurs in the coastal system that is very complex to remedy.

The article is correctly stated, it would be very interesting to make a summary table on the parameters obtained for two sites analyzed in comparison and mainly associated with the vegetation and biomass present in both sites. Other information that could be incorporated into a satellite image comparing the vegetation patches during the analyzed period in order to see where *J. roemerianus* implanted itself and the current state of this scarce colonization. Some authors such as Elijah Ramsey III et al 2002 have carried out monitoring of this species and it constitutes a fundamental tool for the follow-up of specific works such as the one proposed by the authors. Likewise, it would be very interesting to complete the work with this type of images if possible, as it is proposed; it is an important advance with respect to considering the importance of remediation in these coastal environments with the original vegetation and in pristine habitat.

The restoration of marshes and wetlands could be a solution to the problem of environments degraded by human action, it is beneficial for recovering the natural habitats of fauna and optimizing the recreational and cultural uses of the different environments. The results of this work reveal an important database that will surely be used to continue optimizing these two analyzed sites. Although the discussion should also relate the data obtained on the introduced dredged material, its sedimentary composition and why the species *J. roemerianus* could not adapt to this sediment. If the plants used were already adapted to another soil not typical of the island or if their health status was not optimal. The most important thing is that these environments that are under state protection regime can recover their natural habitat and that the mentioned

species can develop a stable and adapted population in the future.