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Conservation of Coral Reefs across Different Regions

Environmental degradation across the coastline has adverse impacts on the ecosystem. Its consequences lead to the destruction of essential plants and animals that are beneficial to humans in diverse ways. For instance, coral reefs not only protect coastlines from erosion but also offer job and recreational opportunities for the surrounding communities and tourists. Recent statistics indicate that over half a billion people rely on coral reefs for income, food, and recreation (Burt et al. 172). This paper offers a literature review concerning the conservation of coral reefs across different regions. Artificial coral reefs can help in the creation of diverse marine ecosystems. Burt et al. affirm that artificial reefs at the Gulf play a major role in attracting valuable animal species such as fish (174). Therefore, environmental specialists and governments should collaborate in the development of artificial coral reefs to mitigate the adverse impacts of pollution of the coastline ecosystems.

Coastal communities can still enjoy the benefits of coral reefs despite the destruction of natural species by pollution. Artificial coral reefs perform almost the same roles as the natural species if specialists employ appropriate measures. Burt et al. describe the significance of developing purpose-built coral reefs in the Gulf. According to the author, artificial reefs have attracted over 50 species of fish at the coastline (174). However, their small size limits the reefs from performing similar roles as the natural species. The study suggests that it is important for coastal communities to continue protecting the natural coral reefs despite the existence of

artificial options. Consequently, they can enjoy maximized benefits of natural options while trying to mitigate the impacts of pollution with artificial reefs.

Artificial coral reefs have diverse applications in life-enhancing programs for coastal communities and tourists. Extensive research and testing are essential in the process of identifying the benefits of artificial coral reefs. The Leaf Global Environmental Services agency describes various proven benefits that include the growth of marine habitat populations, fishing opportunities, and mitigating damage over natural reefs (6). Although the presentation offers information concerning the application of artificial reefs, the authors do not offer detailed guidelines concerning procedures used in research and testing. In their study, Higgins et al. evaluate the efficacy of artificial reefs in sustaining biodiversity (sec. 3). The authors compare spatial and temporal patterns on the benthic assemblage using a 13-mo mensuration experiment. They focus on different types of artificial reefs that include suspended, seafloor, as well as natural reefs at the Gulf.

Regular assessments are crucial to ensure that the artificial coral reefs remain beneficial to the local communities and the ecosystem at large. Corporate players have critical roles in the development and assessment of artificial coral reefs. At the same time, artificial reefs can be developed at a single point and transplanted to different locations. Therefore, other global residents can join the coastline communities in the process of mitigating the adverse impacts of environmental degradation on the natural reefs by formulating the artificial types. Cesar et al. affirm that collaborations among multiple stakeholders are crucial for the maintenance of sustainable coral reef plantations (204). The study analyzes efforts from different parts of the world, including Sweden and East Africa, among others. The authors recommend cost-benefit

analysis during the establishment of new plantations (Ceasar 15). However, the study does not offer specific experiences in the selected areas.

Artificial coral reef development requires collaboration between conservation agencies and governments to ensure that local communities can enjoy sustainable benefits. Based on the review of different studies, artificial coral reefs can mitigate the adverse impacts of pollution on the coastline ecosystems to some extent. However, they do not compare to the natural species. Therefore, surrounding communities should support the artificial types while conserving the remaining natural species.

Works Cited

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