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The resilience of tropical intertidal seagrass meadows, grazed by dugongs, and the impact of anthropogenic stressors

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Stellingen

Behorende bij het proefschrift

The resilience of tropical intertidal seagrass meadows, grazed by dugongs, and the impact of anthropogenic stressors

1. Tropical intertidal seagrass meadows demonstrate varying levels of resilience against environmental changes and anthropogenic stressors depending on their ecological conditions and the presence of key herbivores like dugongs. (Chapter 2)
2. Grazing by dugongs positively influences the health and biodiversity of tropical intertidal seagrass meadows, potentially enhancing their resilience to stressors. (Chapter 2)
3. Effective conservation strategies for protecting seagrass ecosystems and dugong populations must incorporate response plans for mitigating the impacts of oil spills and improving habitat resilience (chapter 3)
4. Effective management and restoration efforts for intertidal seagrass meadows must address sedimentation issues to enhance the resilience of these ecosystems against future environmental challenges. (Chapter 4)
5. Understanding how clonal strategies of seagrasses respond to sedimentation is critical for predicting their resilience and for informing conservation practices aimed at sustaining these valuable ecosystems. (Chapter 5)
6. The strength of grass to survive extreme conditions is not in its leaves but in its rhizomes and roots, because with those rhizomes and roots it stores carbohydrates, which provide energy in times of extreme stress. (Chapter 4-5)
7. As stewards of the ocean, it is our responsibility to take action that ensures the health and longevity of seagrass meadows for future generations. (Duarte, 2002)
8. With coral reef health declining due to global warming, seagrass meadows may be the more resilient tropical coastal ecosystem of increasing importance for both people and the planet. (Unsworth et al., 2018)
9. Coastal activities that increase the dynamics of sediment in coastal waters constitute an important threat to seagrass survival. (Hemminga and Duarte, 2000)
10. There is no doubt that effective management and conservation strategies for dugong populations must focus on enhancing the resilience of seagrass ecosystems. (Björk et al., 2008)
11. When the last tree has been cut down, the last fish caught, the last river poisoned, only then will we realise that one cannot eat money -- Eric Weiner
12. Humans believe they control the ecosystem, but they forget they are part of it.

Anugrah Aditya Budiarsa
Leiden, 23 september 2025