

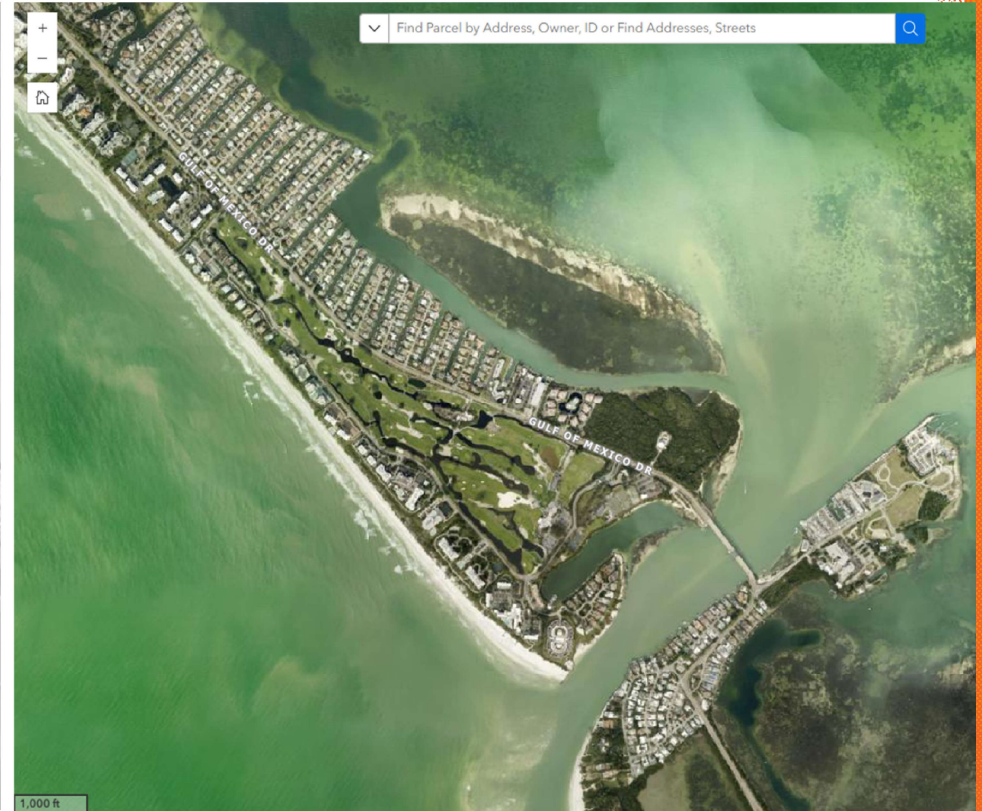
BARRIER ISLAND NATURAL COMMUNITIES



Year: 1948

Aerial photos of southend of Longboat Key

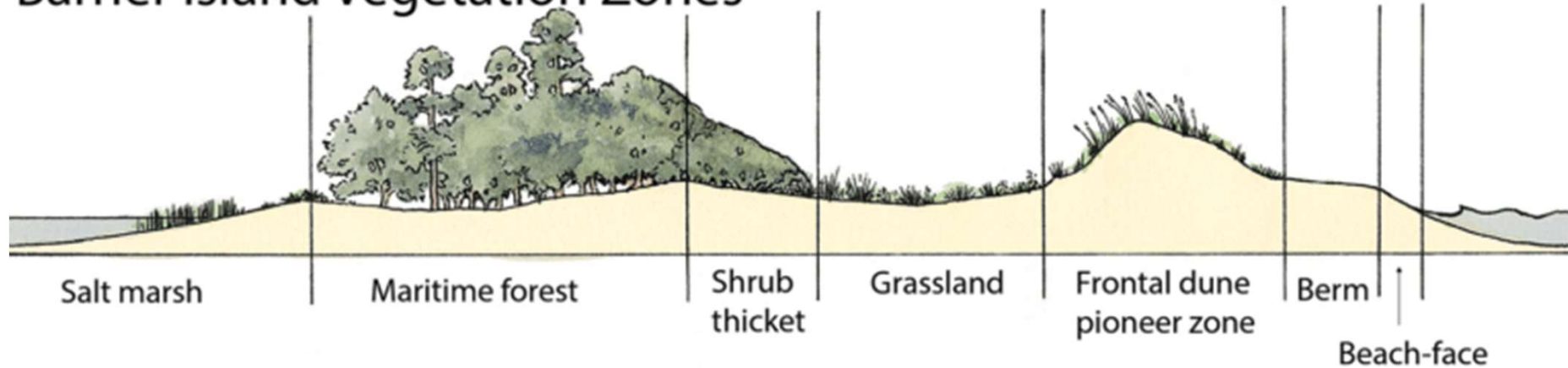
Source: [Sarasota County GIS](#)



Year: 2023

CROSS-SECTION OF A BARRIER ISLAND

Barrier Island Vegetation Zones



Source: [NC Coop. Extension](#)

NATURAL STORM PROTECTION

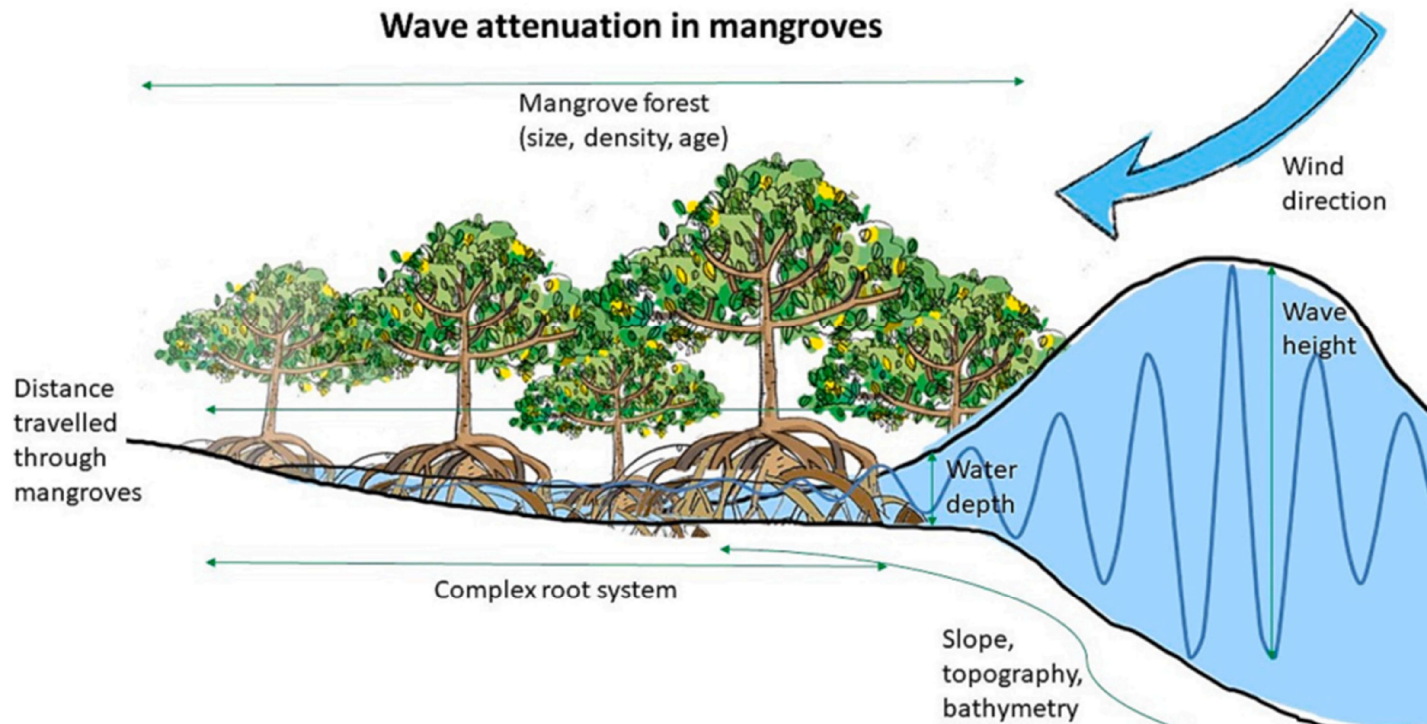


Fig. 3. Mangroves such as *Rhizophora* species have intricate and interconnected root systems that lower wave height under 70 cm in height and decrease wave energy as these pass through mangrove forests by up to 99% across a 500 m wide mangrove forest.

Source: [Mangroves' role in supporting ecosystem-based techniques to reduce disaster risk and adapt to climate change: A review. R. Sunkur, Kantamaneni, K., Bokhoree, C., Ravan, S., 2023](#)

COASTAL LANDSCAPE CONSIDERATIONS

Climate and Site Conditions:

- **Environmentally sensitive areas:** dunes, shorelines, wetlands
- Most coastal **soils** are sandy and alkaline
 - High leeching (i.e., nutrients and salts)
- **Aerosolized Salt**
 - Within 1/8th mile of saltwater coast
- **Palm and Tree Care**
 - Remove only brown (palms)
 - Micronutrients
 - Certified arborist
- **Wind-tolerant** (50-70 mph)
 - Cat 1 = 74-95 mph



These palms are OVER-PRUNED / "hurricane cut"

UF/IFAS RESOURCES

- **Upcoming classes and tours**
- **Florida-Friendly Landscaping™**
 - Right Plant, Right Place
 - Salt tolerant plants
 - Wind resistant trees
- **Soil and Water Testing**
- **Resources for HOAs**
- **Blogs, social media and newsletters**
- **Coastal Permitting Contacts**

Scan for resources



<https://linktr.ee/ellis.amae>