(Photo/Florida Sea Grant)

LIVING SHORELINES AND COMMUNITY SUPPORT

By Lauren Bovett

Living shorelines are an integral part of introducing ecosystems into communities, increasing protection and support for waterfront communities in Cedar Key, Florida. These ecosystems are a protected and stabilized shoreline made of natural materials. They are a way to use a natural coastal ecosystem to protect from property damage.

The Nature Coast Biological Station (NCBS) is an extension of the University of Florida, Institute of Food and Agricultural Sciences (UF/IFAS). The NCBS continues to develop the UF/IFAS mission of research teaching, and extension in the Nature Coast region. The Nature Coast Biological Station in Cedar Key hopes to find community support for creating and maintaining the living shorelines.

Many people who live in waterfront communities understand the importance of protecting their homes and properties from damage and flooding that can come from the waters. In the past, the solution to protecting properties were with seawalls or hardened infrastructures made from concrete that protected homes from flooding and the impacts that occur by being a waterfront property.

According to Dr. Savanna Barry, the NCBS Regional Specialized Extension Agent, seawalls can be expensive and with increased impact overtime, may need to be replaced. Living shorelines, however, absorb the pressure and impact that waves cause when coming into contact with them, instead of deflecting it to surrounding properties. Living shorelines are cheaper to install and last a lifetime.

"The day you build it is going to be the weakest it ever is, and they are only going to get stronger over time. Exactly the opposite is true of hardened infrastructure like a seawall – it's actually going to be the strongest it will ever be on the first day and will continue to slowly degrade over time and eventually have to be replaced," said Savanna Barry, the NCBS Regional Specialized Extension Agent.

Nature Coast Biological Station works to implement living shorelines in waterfront communities. Currently, the NCBS has three different living shoreline projects that members of the community can go to and learn more by taking a tour in person or self-guided through an app-based experience. These are located in Cedar Key at the NCBS, on Airport Road, and at Joe Raines Beach.

The living shoreline projects give the Cedar Key and surrounding communities' members the opportunity to get involved in research and science, where data gaps are common because of the rural landscape. At NCBS, Barry works closely with the community to help fill those gaps. Barry's programs focus on creating opportunities for citizen science, which enhance the quality and management of habitats and species within the Nature Coast Region.

"Another way is getting people involved in actually collecting scientific data and giving them respect for the scientific process, while also filling data gaps. Where I'm based in Florida is pretty rural. A lot of data collection programs around the state have data gaps where we are. So, it serves a dual purpose in getting people involved in science through citizen science initiatives and water quality monitoring and things like horseshoe crab populations," said Barry.

Volunteering with living shorelines installations and with other research opportunities help the NCBS bridge data gaps and help the community become more involved. To learn more about how to volunteer and partner with the NCBS, go to https://ncbs.ifas.ufl.edu/contact/ .

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STREAMING SCIENCE

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