

Hard-Working Volunteers and Soft, Steep Bottoms – Using Oyster Catcher Materials as Part of a Shoreline Protection Solution



Bo Lusk, Coastal Scientist The Nature Conservancy blusk@tnc.org

- Working Waterfront





NFWF Shoreline Project





NFWF

Varying conditions require different designs and substrates combinations along the 692 m of shoreline





Ideal Conditions for Castles - Only Along 34% of Shoreline



Sections with harder, sandy bottom up to marsh scarp. Sediment must be relatively even for castles to interlock.



- Necessary Along **41%** of Shoreline



Very soft, uneven bottom at marsh scarp. Water depth increases quickly away from marsh.



- Trial along 25% of Shoreline



Sections with firmer, more level bottom offshore and uneven, muddy bottom at marsh scarp



This is going to require a lot of substrate!

- Must produce over 2000 pieces of Oyster Catcher materials
- Set up license agreement with Sandbar Oyster Co.
- Constructed simple production facility
- Pledged about 4,000 volunteer hours as match
- Crossed our fingers that we could teach our volunteers to do this!





Volunteers soaking jute in cement and forming materials











Recruitment on both substrates, Castles and Oyster Catcher, 1.5 months post-deployment







Bo Lusk Coastal Scientist The Nature Conservancy's Virginia Coast Reserve blusk@tnc.org