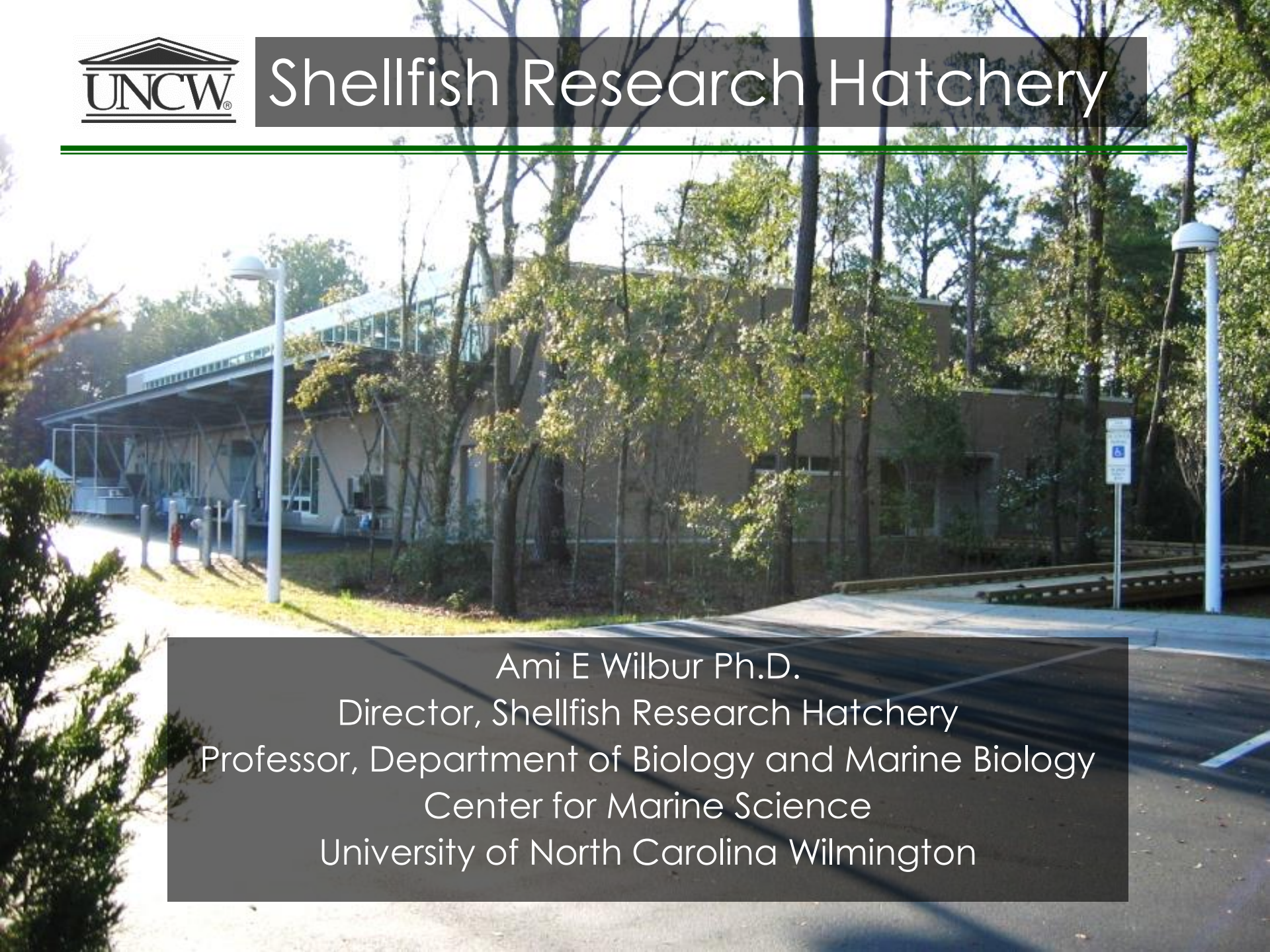




# Shellfish Research Hatchery



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# Shellfish Research Hatchery

- Strategies for increasing productivity
  - Selective breeding of oysters





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  - Selective breeding of oysters





# Shellfish Research Hatchery

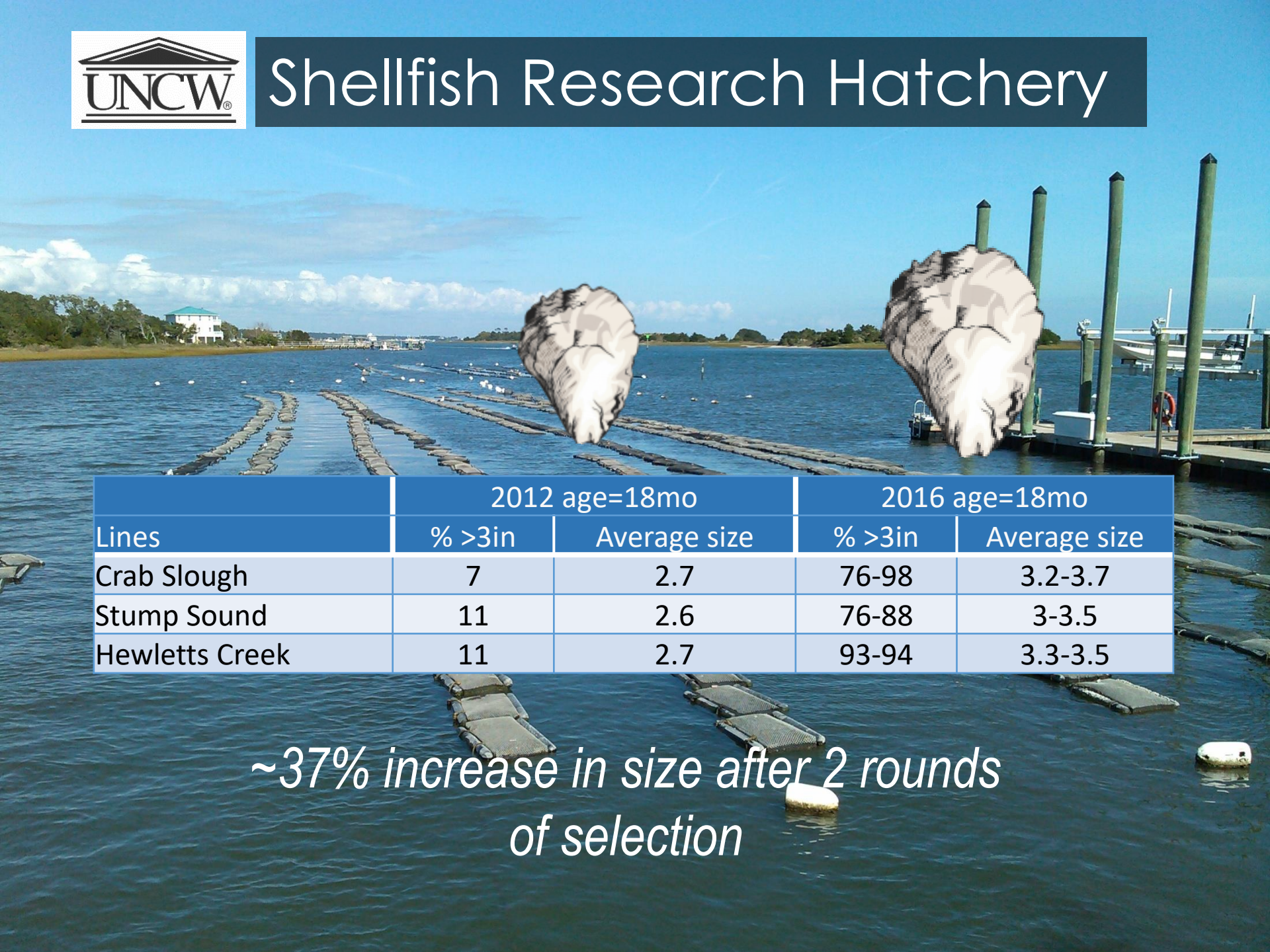


- Strategies for increasing productivity
  - Selective breeding of oysters





# Shellfish Research Hatchery

The background of the slide is a photograph of a shellfish hatchery. It shows several long, parallel rows of floating racks in a body of water. In the distance, there are green trees and a white building with a blue roof. The sky is blue with some white clouds. Two large, realistic-looking oysters are superimposed on the image: one in the center and one on the right side, both appearing to float above the racks.

Lines	2012 age=18mo		2016 age=18mo	
	% >3in	Average size	% >3in	Average size
Crab Slough	7	2.7	76-98	3.2-3.7
Stump Sound	11	2.6	76-88	3-3.5
Hewletts Creek	11	2.7	93-94	3.3-3.5

*~37% increase in size after 2 rounds  
of selection*





# Shellfish Research Hatchery

Triploids

Diploids

15 mo. Stump Sound half-sibs

- Strategies for increasing productivity
  - Polyploidy





# Shellfish Research Hatchery



Bay scallops  
*Argopecten irradians*



Sunray Venus Clams  
*Macrocallista nimbosa*



Pen Shells  
*Atrina rigida*

- Strategies for increasing productivity
  - Crop diversification





# Shellfish Research Hatchery

- On the horizon

- Ongoing Hurricane recovery
- New research collaborations
  - East Coast Shellfish Breeders Consortium
    - 9 programs working to bring cutting edge technology to facilitate the breeding of a better oyster
  - Regional Oyster Aquaculture Development Consortium
    - 10 institutions/agencies working to better understand how oysters & the environment interact, particularly around unexplained mortality events