

Shellfish Aquaculture in Dixie County



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Industry development— Florida's Big Bend

In the 1990s due to:

- Job retraining programs for former fishermen and women
- Excellent leasing program and regulatory framework
- Year-round growing conditions
 - Fast growth rates
 - Short crop periods
 - Continuous production



Shellfish aquaculture retraining programs

- Federally-funded, community-based programs provided employment opportunities for fishermen affected by regulatory restrictions
 - “Hands-on” training
 - Classroom curriculum
 - Establishment of leases for program graduates



Retraining programs



Gulf of Mexico

- Served 4 coastal counties- Taylor to Citrus
- Culture technology transferred
- Over 200 former fishermen placed into small businesses
- 948 acres of leases established in Levy and Dixie Counties



Project OCEAN, 1991-3

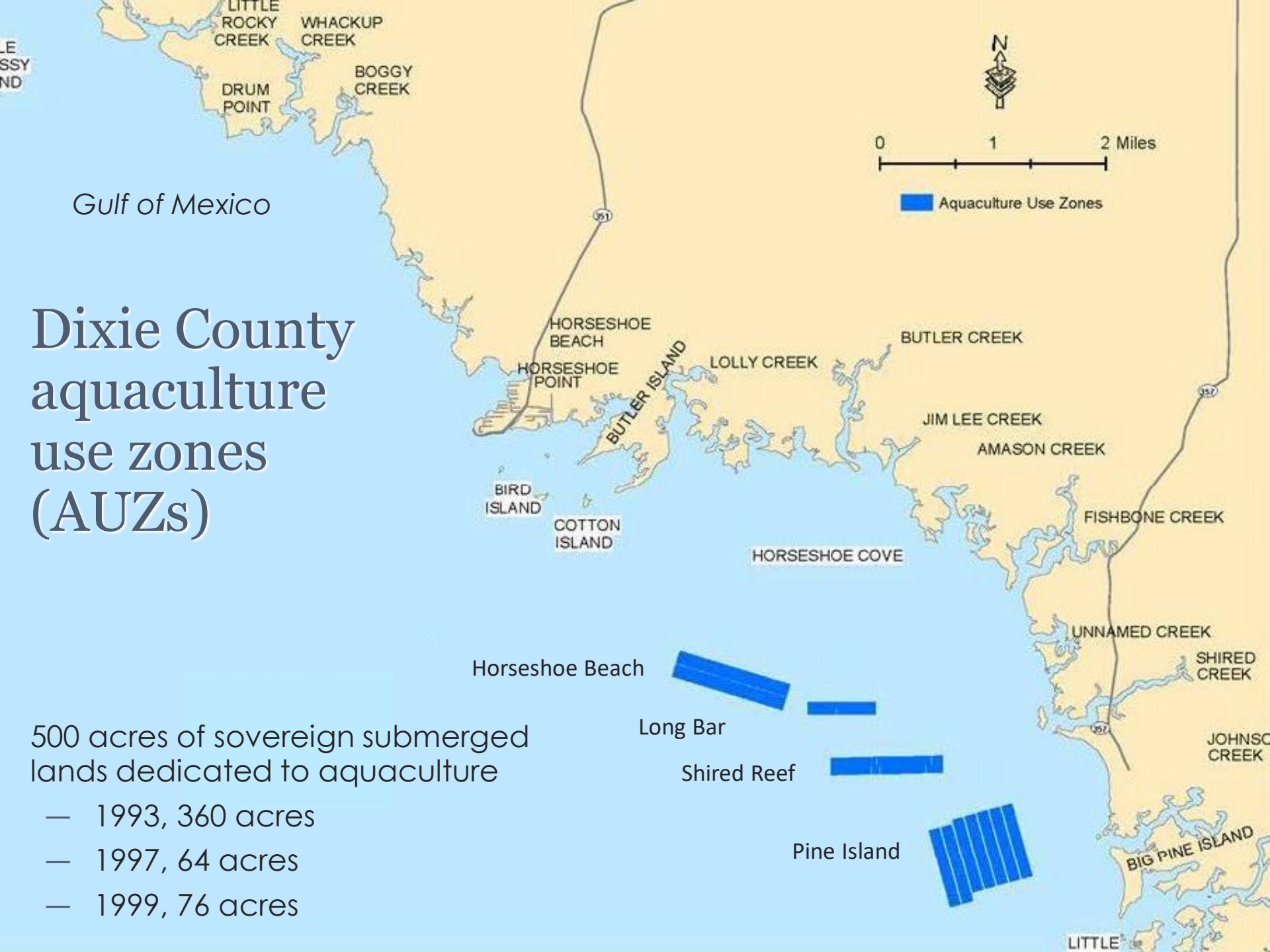


Project WAVE, 1995-7



Graduation, 1993

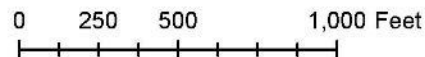
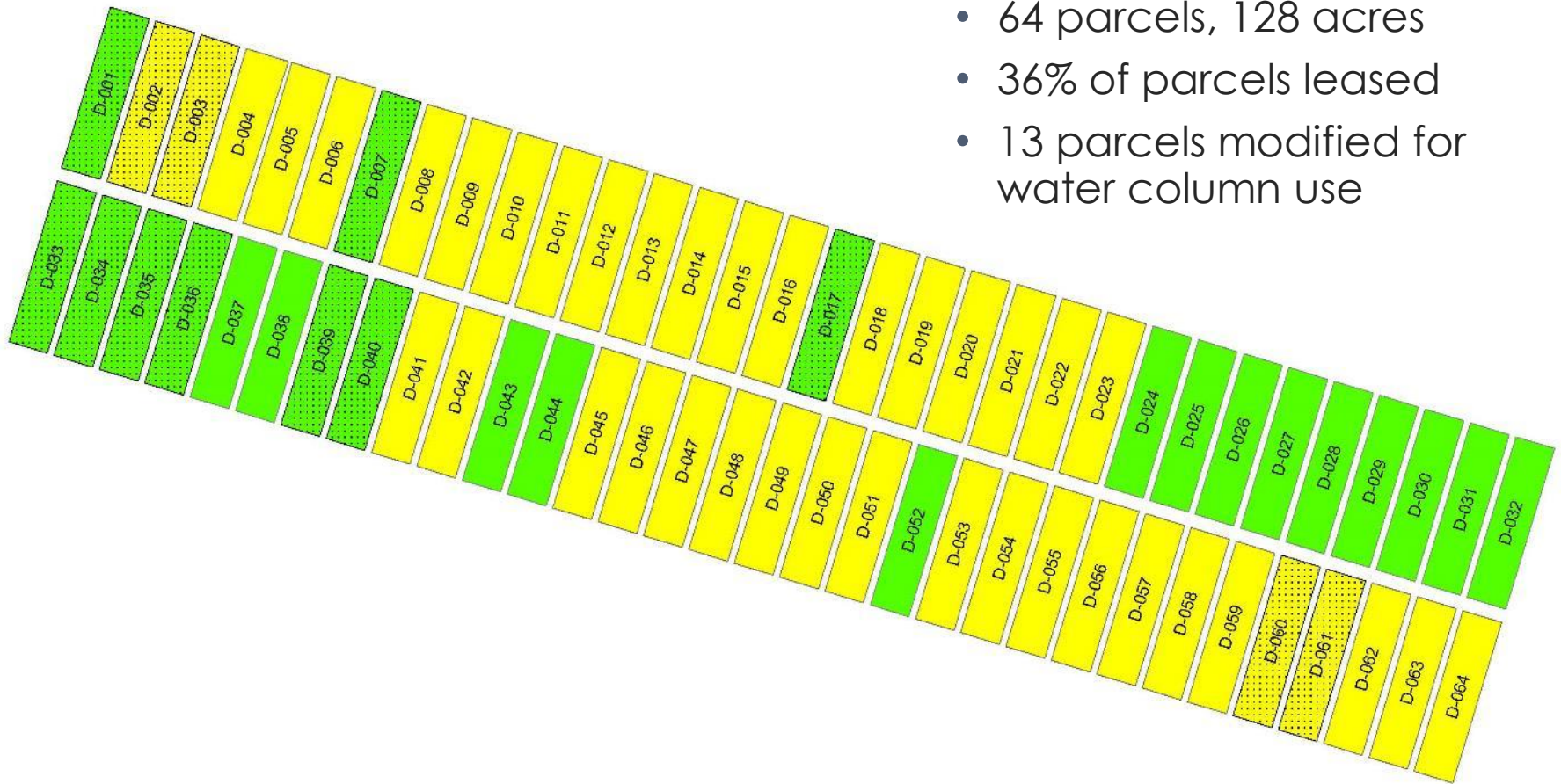




Horseshoe Beach AUZ

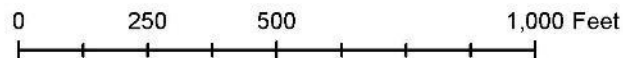
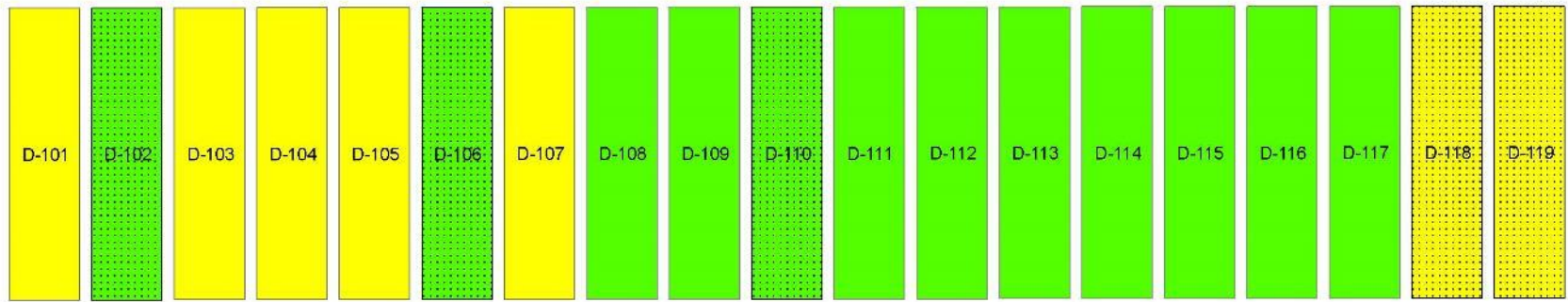
This product, produced by Florida Department of Agriculture and Consumer Services, Division of Aquaculture, is for informational purposes only. Maps are current as of the date generated and parcel availability can change frequently. Please contact the division at (850) 617-7600 or by email at Denise.Walsh@FDACS.gov for up to date availability.

- 64 parcels, 128 acres
- 36% of parcels leased
- 13 parcels modified for water column use



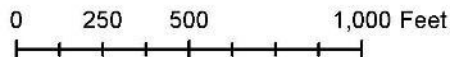
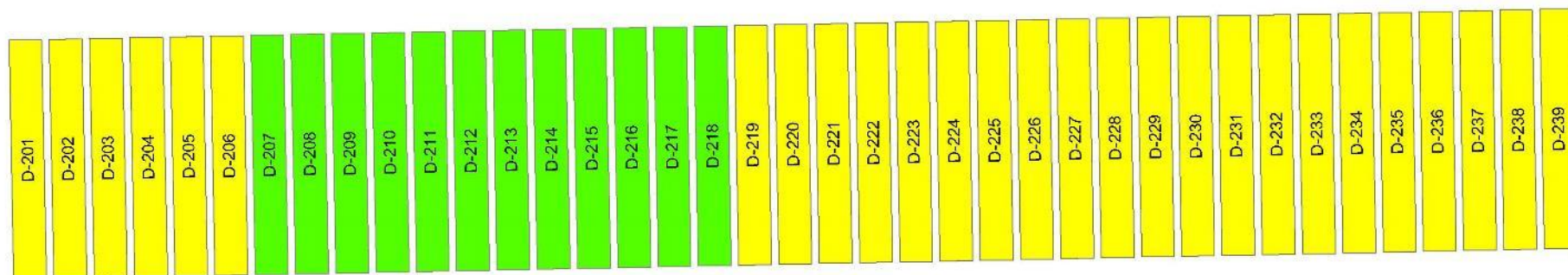
Long Bar AUZ

- 19 parcels, 38 acres
- 63% of parcels leased
- 5 parcels modified for water column use



Shired Reef AUZ

- 39 parcels, 78 acres
- 31% of parcels leased
- Designated for bottom use only



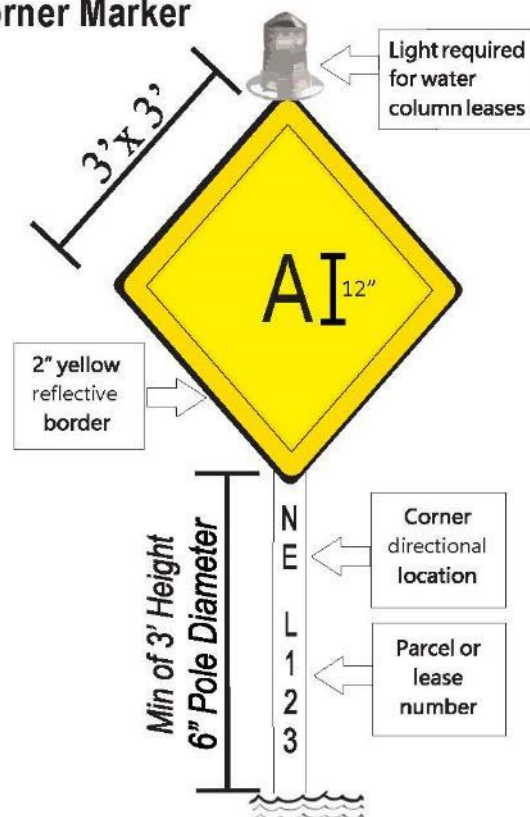
Pine Island AUZ

- 128 parcels, 256 acres
- 4% of parcels leased
- Designated for bottom use only



Shellfish lease markers

Corner Marker



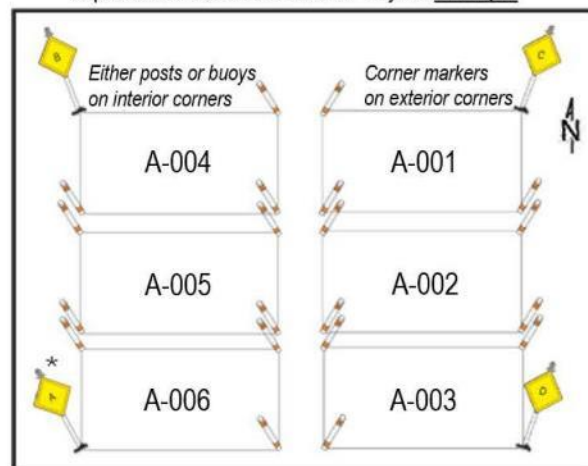
Optional

Sign can be installed at any corner of the parcel in conjunction with the lease markers illustrated above.

Post, buoy and corner marker labels in this example are for reference only. Refer to your lease agreement for specific marker locations, types required and parcel/lease identification numbers. Refer to U.S. Coast Guard Private Aids to Navigation for lighting requirements.

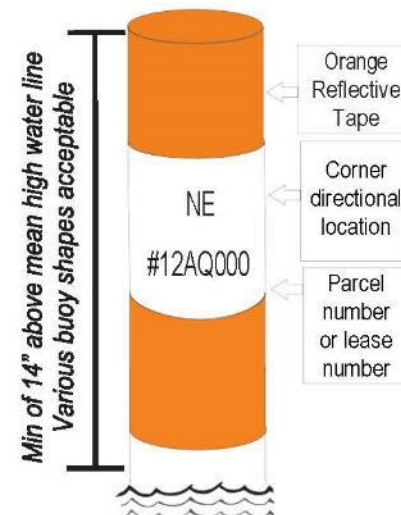
Contact the Division of Aquaculture for assistance at (850) 617-7600.

Aquaculture Use Zone Marker Layout Example

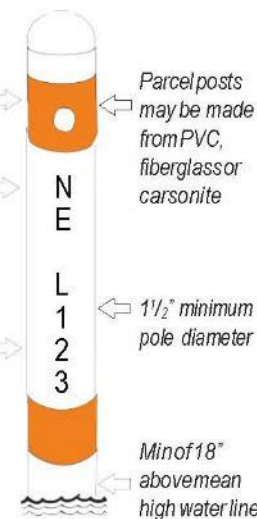


* "A" corner marker starts at southernmost corner.

Parcel Buoy



Parcel Post



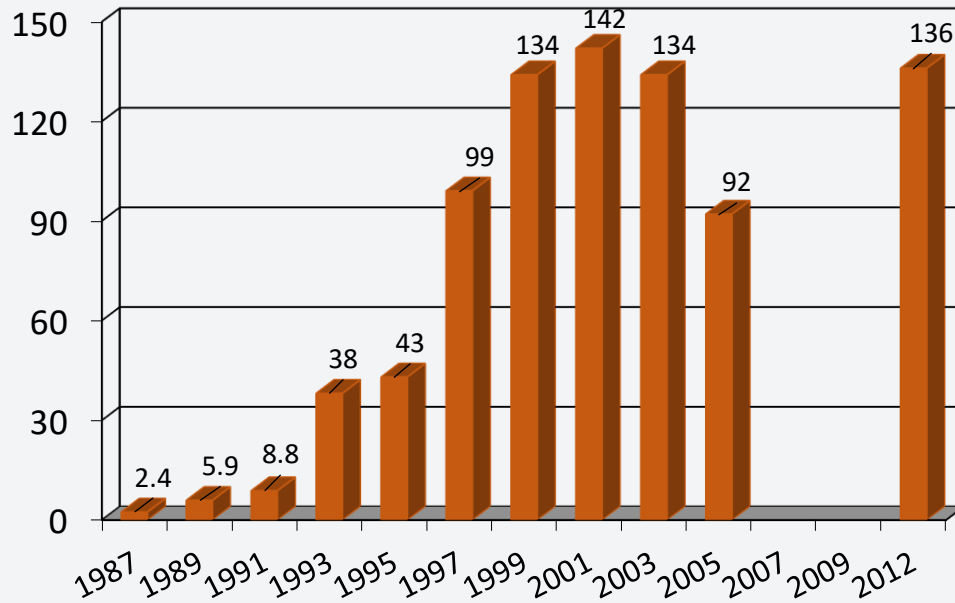
Status

- 15 certified shellfish growers*
- 51 parcels leased (102 acres)*
 - 24 acres – hard clams
 - 14 acres – clams and oysters
 - 40 acres – oysters (bottom)
 - 24 acres – oysters (off-bottom)
- Minimum amount of seed planted per year – 5.3 million
 - 3.1M clams
 - 2.2M oysters

*Obtained from FDACS
Division of Aquaculture



Clam Production, millions



Status

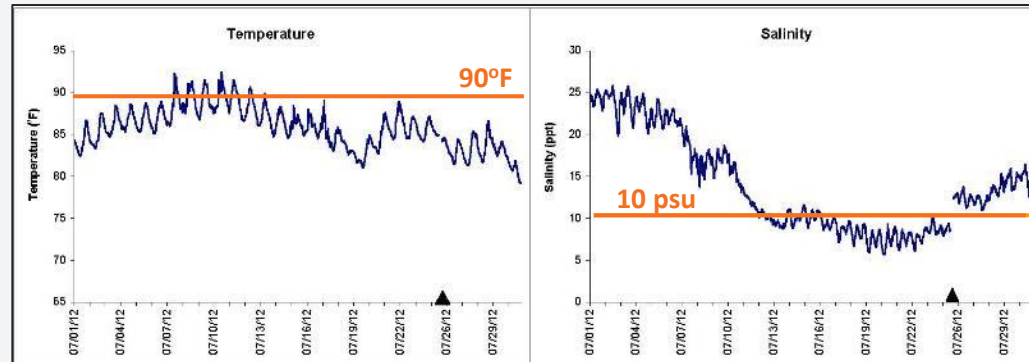
- FWC Trip Ticket Program
 - Shellfish wholesalers not required to report aquaculture products
- Florida Aquaculture Surveys
 - Conducted by FASS, 1987-2007, 2012
 - Clam production, sales value, seed plantings
- Economic Impacts
 - Conducted by UF/IFAS, 1999, 2007, 2012
 - \$39M gross revenue impact
 - >550 jobs supported
- National Aquaculture Census
 - Conducted by USDA, every 5 years
 - \$16M value of sales, 2018

Production limitations and risks

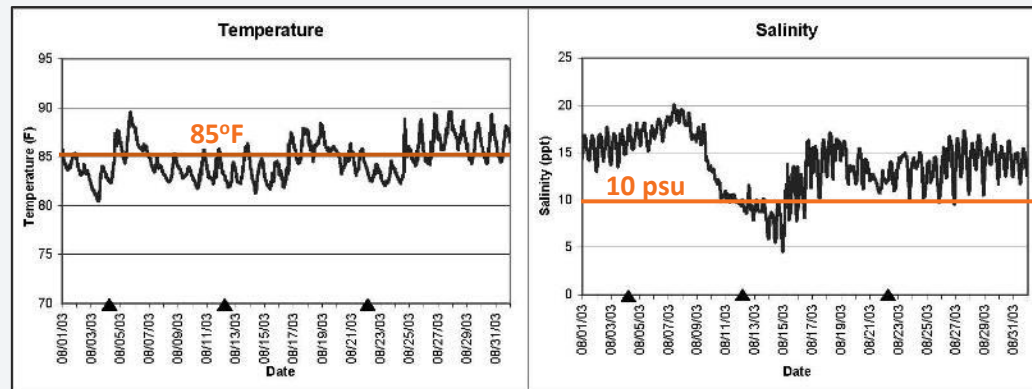
- Limited capital available for commercial startup
- Prevailing winds in summer push river discharge north
- Low salinities with high water temperatures detrimental to clam health and survival
- Environmental risks also include storms and hurricanes

<https://shellfish.ifas.ufl.edu/water-quality-monitoring/horseshoe-beach/>

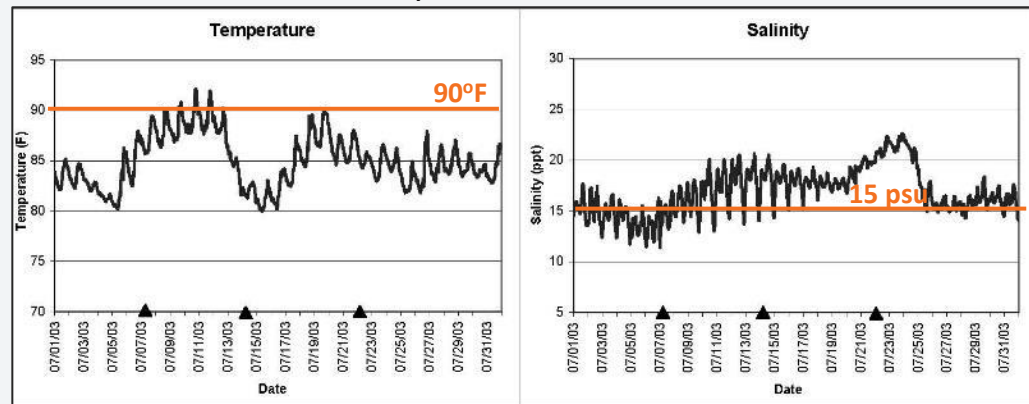
Horseshoe Beach AUZ, July 2012



Horseshoe Beach AUZ, August 2003



Horseshoe Beach AUZ, July 2002



Hard Clam Aquaculture in Florida

A SUSTAINABLE INDUSTRY

UF IFAS
UNIVERSITY of FLORIDA

Sea Grant
Florida

Providing

JOBS in rural
coastal communities



**ENVIRONMENTALLY
BENEFICIAL**
ecosystem services



**HEALTHY,
NUTRITIOUS
and LOCALLY
PRODUCED** seafood



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