

# FLORIDA'S ECONOMY IS EXPANDING Under the Sea

**Florida Sea Grant and UF/IFAS Extension are providing the information needed to help Florida's citizens and visitors appreciate the diversity, innovation and economic importance of the state's aquaculture industry.**



It's easy to visualize citrus crops, fields full of vegetables and cattle herds when Florida's agriculture industry is mentioned. But what comes to mind with Florida's aquaculture? Most people picture fish and plants being grown and sold as food items.

The inability of wild seafood harvests to keep up with the demand for seafood and other aquatic food products has motivated growers to increase the culture of food from our oceans. Indeed, the Florida commercial aquaculture industry has long been recognized as one of the most diverse in the nation, with a "pond gate" harvest value of \$70 million associated with dozens of species according to recent USDA statistics.

#### Molluscan Shellfish Culture a Big Success

One of the state's most dramatic success stories has been in the culture of clams. Hard clams are grown on nearshore, submerged leases off several areas of the state's coast. In addition to the hundreds of leases that now exist, there are many spin-off businesses that have developed in support of the clam aquaculture industry.

For instance, there are hatchery operators who produce seed for growers, seamstresses who make clam bags, boat builders who specialize in clam work skiffs, and manufacturers who produce harvesting and processing equipment. Shellfish wholesalers purchase clams from growers, add value, and distribute to markets nationwide. The industry also provides local employment, such as processing plant workers and truck drivers.

Florida Sea Grant and IFAS Extension specialists conducted a study of the economic contribution associated with the Florida clam industry in 2012. Highlights of the study include:

- Sales by growers to wholesale dealers totaled \$12.3 million and sales by dealers totaled \$19.5 million.
- From production site to the final buyer, \$21.9 million in added value was generated.
- The clam culture industry supported 543 jobs and generated \$14.7 million in labor income.

- Hard clam sales generated \$1.4 million in state/local tax revenues and \$2.7 million in federal taxes.
- Gross revenue impact to the state's economy was estimated to be \$38.7 million.

"This has been a tremendous success story," says Florida Sea Grant Marine Economics Specialist Chuck Adams. "We are using this model to diversify with other species like sunray venus clams. This is an attractive native clam, and research supports the existence of a strong market demand."

"Oysters are also in high demand with the dramatic decline of wild harvest. The ability to culture oysters in water columns will increase the value of Florida's oyster industry. Every project we pursue in aquaculture is based on solid research and driven by market demand."

#### Innovations in the Industry

Florida's aquaculture industry has been evolving in other directions as well, particularly toward non-food species. Aquacultured products now play a major, innovative role outside the food products markets. The demand for saltwater ornamental fish and aquatic plants for the aquarium trade continues to grow, providing opportunities for the state's existing tropical fish growers. In fact, Florida is the nation's leader in ornamental fish culture.

Florida is also the only one of the 48 contiguous states that has coral reefs. According to a 2012 report by the National Oceanic and Atmospheric Administration, these exquisite creatures of the sea contribute \$8.5 billion to Florida's economy each year. Florida is championing efforts to sustain coral reefs by hiring a restoration aquaculture specialist at the University of Florida. This new faculty member will develop programs and partnerships with organizations focused on cultivating plants and marine life that are dwindling in number due to damaged ecosystems. The culturing of corals for the purpose of restoring damaged reefs is a key role.

Further research and educational efforts on these culture technologies and their economic viability will help ensure the efficiency and sustainability of this growing industry.

#### ABOUT FLORIDA SEA GRANT

Florida Sea Grant is a university-based program that taps into the research expertise of more than 800 coastal and ocean scientists at the state's 16 major universities and research laboratories. The program's goal is to support research, education and extension to enhance economic opportunities for Floridians while protecting coastal resources. Florida Sea Grant is a partnership with the National Oceanic and Atmospheric Administration, the Florida Board of Education and Florida's citizens and governments.

The program is also an integral part of the Institute of Food and Agricultural Sciences at the University of Florida, one of the nation's leading land-grant universities. Extension and education programs are conducted in partnership with UF/IFAS Extension and coastal counties of Florida.

Sea Grant agents live and work in coastal communities. They have a breadth of experiences and tremendous trust from their local residents as reliable sources of science-based information. Seven statewide extension specialists also lead highly relevant programs in seafood safety, boating and waterway planning, land-use law, aquaculture and fisheries management.



Learn more about aquaculture in Florida:

[FISeaGrant.org](http://FISeaGrant.org) • [ShellFish.ifas.ufl.edu](http://ShellFish.ifas.ufl.edu)

Or contact: Chuck Adams  
Florida Sea Grant Marine Economics Specialist, UF/IFAS Extension;  
Professor, Food and Resource Economics, University of Florida  
352-294-7667 • [cmadams@ufl.edu](mailto:cmadams@ufl.edu)