

OCEAN SPRINGS - Sen. Thad Cochran joined Southern Miss officials here Sep 20 to announce that a private company is launching the indoor marine shrimp farming industry in Mississippi based on technology developed by USM. Cochran praised the efforts of USM scientists working here at Gulf Coast Research Laboratory, which is part of USM's College of Marine Sciences, to build upon past successes in shrimp farming.



"We need to have dreams for the future, Cochran said. "This facility is an example of that." The announcement by USM President Horace Fleming marks a major milestone in more than a decade of research and development to create a competitive marine shrimp farming industry in the United States.

Penaeus, Ltd. is the first Mississippi company formed to produce marine shrimp indoor grow-out systems, one of the technologies developed at GCRL.

The systems use greenhouses to protect shrimp from foreign shrimp viruses that are deadly to shrimp but pose no danger to humans. They combine water recycling systems developed by

John Ogle at GCRL and disease-resistant shrimp.

"This research has made commercialization feasible," said Jim Johnson, president of the Penaeus board of directors. "Without this research base, we would not have been able to start this new industry in Mississippi"

Penaeus is supporting GCRL research and development that will bring the indoor systems up to commercial production. Johnson said the first harvest from the company's prototype grow-out unit at GCRL is expected in mid-to-late October. The corporation is planning to begin construction in 2000 of its first commercial hatchery, nursery, and grow-out facilities on the Gulf Coast and a second grow-out facility in the Mississippi Delta.



Johnson said the company's business plan envisions an integrated process where Penaeus, Ltd. will own the hatchery and provide the shrimp larvae, the feed and the technical assistance to the contract growers. The growers would provide the facilities, the labor and the supervision during the grow-out. Penaeus would be responsible for marketing the shrimp when they reach matur-

ity and for payment to the growers. One of the company's long range goals is to supply shrimp to upscale restaurants.

Fleming also recognized Cochran's 14 years of support for shrimp-farming research. Cochran has been instrumental in gaining congressional support for the U.S. Marine Shrimp Farming Program conducted by a consortium of research institutions through U.S. Department of Agriculture. The consortium is headquartered at GCRL.

Shrimp consumption in the United States reached an all-time high in 1998, second only to tuna. Americans imported nearly 80 percent of the shrimp consumed, contributing to the nation's \$5.8 billion seafood trade deficit

GCRL scientists and their colleagues in the consortium introduced high health shrimp stocks in 1989. Production in outdoor shrimp pond operations more than doubled in the 1990s. When foreign shrimp viruses began devastating shrimp crops in pond systems, GCRL researchers worked on finding ways to make pond-based shrimp farms viable. They also experimented with the indoor "closed" systems that do not require high rates of water exchange that are typical in pond-based farming.

The closed systems protect both the shrimp crop from disease and reduce waste water production.