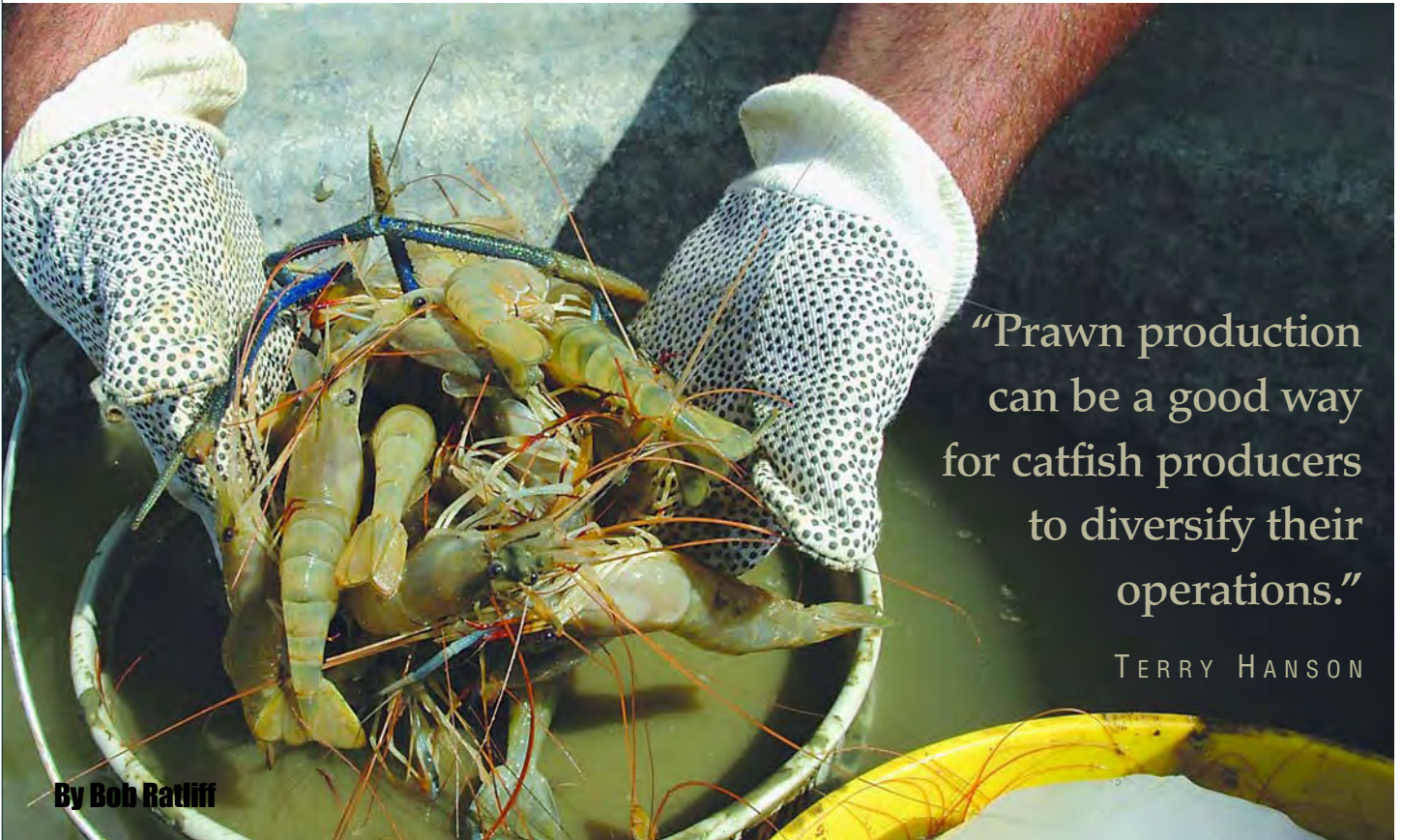


# Freshwater Prawns:

Mississippi's New Aquaculture Crop



"Prawn production can be a good way for catfish producers to diversify their operations."

TERRY HANSON

By Bob Ratliff

Photos by Bob Ratliff

After extensive scientific research, at least one food scientist has reached a definite conclusion about freshwater prawns.

"They are just good," said Patti Coggins, director of the Garrison Sensory Evaluation Laboratory at Mississippi State University.

Coggins is one of a group of MSU scientists studying the feasibility of growing prawns in Mississippi, and she has data from formal sensory evaluation studies, including taste tests, to back up her personal opinion.

"The prawns do not have the iodine content of marine shrimp and are low in fat," she said. "Their taste is sweet, comparable to lobster, and has consistently scored high in sensory evaluations."

The university research confirms what Dolores Fratesi has known for more than 10 years.

"Prawns are a delicious and very healthy product," she said. "We feel we have a premium product."

Dolores and her husband Steve began growing prawns in 1995 as a way to diversify catfish production on their Lauren Farms operation near the Delta town of Leland. She quickly

became the head cheerleader for the tasty crustaceans, and her enthusiasm has not waned. In fact, she is the current president of the United States Freshwater Prawn and Shrimp Growers Association.

"Ten years from now, I'm sure consumers will walk into their grocery store with freshwater prawns on their shopping lists," she said.

Dolores travels the South and beyond promoting her Delta-grown delicacy through media interviews, seminars and at events such as arts and crafts fairs. She also is featured preparing a prawn recipe once a month on a cooking program on WABG-TV in Greenville.

The Fratesis have about nine acres in production of Giant Malaysian Prawns and harvest an average of 800 to 900 pounds per acre. The prawns are classed either jumbo or large, and it takes only 14 to 22 jumbo prawn tails to produce a pound of meat.

The Fratesis also operate a hatchery, selling stock to other producers, which now total about two dozen in Mississippi. They have cooperated with Mississippi State's freshwater shrimp research since entering the business.

One of the first MSU researchers they worked with was Department of Wildlife and Fisheries professor Louis D'Abramo, a pioneer in Mississippi freshwater prawn production throughout the last two decades.

"We began looking at freshwater prawn production in 1985, but it took almost five years to develop a successful production system for Mississippi," D'Abramo said. "The Fratesis put a lot of time and effort into studying the production system and following the recommendations that came out of our research. As a result, they were among the first successful freshwater prawn producers in the state."

Success, however, came slowly, with low production the first two seasons. Once production began climbing, the Fratesis faced another problem—marketing.

"We began with pond-bank sales to the public, but weather can certainly be a factor on sale days, so we began looking for other options," Dolores said.

Their next approach was to go directly to grocery stores.

"We've established a relationship with several stores in Mississippi," Dolores said. "Locally produced items do well in independent stores, and interest is increasing."

A USDA Rural Development Value-Added matching grant is helping MSU develop marketing information and support for prawn producers. The research and product development at the sensory evaluation laboratory is part of that work. Another part of the research is work with packaging and freezing techniques by food scientist Juan Silva. He has developed methods of quick-freezing prawns immediately after harvest to insure freshness.

The USDA grant and support from the Mississippi Agricultural and Forestry Experiment Station also has enabled MSU agricultural economists to conduct consumer acceptance and cost-of-production surveys.

"We've surveyed prawn producers in several states about their production costs," said Terry Hanson, one of the economists doing prawn-marketing research. "The results are being published and will help producers see ways to cut their costs and give potential producers an indication of whether they can make money growing prawns."

Hanson, along with fellow agricultural economist Darren Hudson and graduate student Karina Gallardo, also conducted a mail-out survey and in-store consumer surveys at supermarkets in Starkville and Germantown, Tenn.

The surveys showed that more than 80 percent of first-time freshwater prawn consumers would try the product again.

"One of the things we found was that shoppers view prawns as an acceptable substitute for shrimp when the price is about the same and they are packaged for sale with the heads off," Hanson said. "There are individuals who want prawns with the heads on for a gourmet presentation, but most consumers prefer not to have to remove the heads."

The agricultural economist added that prawn production and marketing studies all point to the need for individuals like the Fratesis to act as middlemen.

"Prawn production can be a good way for catfish producers to diversify their operations," he said. "But since most will not be producing large quantities, there's a need for middlemen to buy from several sources and handle the marketing to supermarket chains and restaurants. People with Dolores' enthusiasm can fill that role and help introduce consumers to another top-quality farm-raised aquaculture product."



Dolores Fratesi, top, and her husband Steve are growing, packaging and marketing freshwater prawns at their farm near Leland.