Unlikely niche: Blue Ridge Aquaculture has become the country’s biggest producer in indoor-raised tilapia

In a region better known for NASCAR and manufacturing plants, Blue Ridge Aquaculture has become the country’s biggest producer of indoor-raised tilapia.

By Jorge Valencia | The Roanoke Times

RIDGEWAY -- Displaced furniture workers harvest more than 5,000 fish every day from this farm near Martinsville Speedway.

They pump them into white tanks that -- like some of the chairs they used to assemble -- are hauled in 18-wheeler trucks to buyers in Washington, Toronto and points in between.

"I'd drive by and I'd see guys driving with 'Live Fish' on the side of the truck. I was like, 'Man, that looks like it's a fun job,' " former furniture worker Allen Jackson said on a recent morning.

Some 35 people work for Blue Ridge Aquaculture, an 18-year-old company that has become the country's biggest producer in its niche market: indoor-raised tilapia. Innovative businesses such as this one are changing the work force in a region better known for its NASCAR races and manufacturing plants that closed because their production was outsourced.

Relative newcomers near here include Applied Felts, which employs more than 150 people making sewage system liners, and Commonwealth Laminating & Coating, which employs more than 200 making window films.

But perhaps the most unexpected one is Blue Ridge Aquaculture, which annually produces 4 million pounds of tilapia, thousands of miles from the fish's natural tropical habitat. The company is looking to expand by growing shrimp and cobia.

"Our facility is maxed out for production right now," said James Franklin, the company's vice president.

Finding its market

Before Blue Ridge Aquaculture found its market, President and CEO William Martin had other careers. He got his professional start working for the Martinsville Bulletin, a daily newspaper that his father published.

Martin was publishing a small newspaper in West Memphis, Ark., when he read about research on indoor fish farming. He later traded commodities and sold commercial real estate before starting Blue Ridge Fisheries in 1986, raising catfish in tanks filled with recirculated water, then cutting them to sell their fillets.

"I think entrepreneurship does not know a business," Martin said. "I could trade commodities, I could sell commercial real estate or I could publish a newspaper. There was not anything I found particularly outstanding about walking out the door and opening the world's largest indoor fishery."

The catfish farm went out of business in 1991, and the current iteration of Martin's business came two years later. Blue Ridge Aquaculture changed focus to the relatively small market of live tilapia.

According to industry group National Fisheries Institute, the average American ate 1.21 pounds of tilapia in 2009, making it the fifth-most-consumed seafood in the country. About 95 percent of that is made up of frozen fillets imported from eastern Asia (mainly China) or fresh fillets imported from Central and South America (mainly Honduras, Costa Rica and Ecuador), according to an estimate by University of Arizona environmental science professor Kevin Fitzsimmons, who researches tilapia farming.

Twenty-five percent of the tilapia produced in the United States is grown in tanks filled with recirculated water, Fitzsimmons said. Blue Ridge Aquaculture has harnessed that technology with the help of farming research from Virginia Tech.

Tilapia has recently grown in popularity because of its flaky consistency, mild taste and versatility. Most consumers of live tilapia in the U.S. buy them out of glass tanks in ethnic grocery stores or restaurants.

Researchers helped the company breed white tilapia that would grow quickly without using hormones or antibiotics, build filters that convert ammonia from fish waste into nitrogen that can be safely released into the environment, and build a system to remove solid fish waste so it can be composted, said Tech food science professor David Kuhn.

At the company's 90,000-square-foot plant, about 100 male and 200 female tilapia swim in pools inside a greenhouse, where every Wednesday workers collect the eggs from the females' mouths by turning them upside down into buckets. In a separate room, the eggs are hatched in small bins. The young fish swim in small pools and later are moved to one of 42 57,000-gallon tanks in a warehouse, where they spend most of their eight-month growing process until they're harvested.
The farm doesn’t discharge into the local watershed because it reuses 99 percent of its water and pays the local public treatment plant to treat whatever water is wasted, said Steven Summerfelt, who has reviewed the company’s process for The Conservation Fund’s Freshwater Institute, a nonprofit group that researches sustainable water use.

"Blue Ridge Aquaculture demonstrates one of the best possible approaches for sustainable seafood production," Summerfelt said.

**Filling a need in the region**

Most of the world’s tilapia, which is native to North Africa and is also known as St. Peter’s fish, is raised in farms along the tropics.

Blue Ridge Aquaculture has perhaps benefited from being in this area lined with rolling hills where tobacco and manufacturing industries have shrunken and the unemployment rate hovered around 20 percent last year.

Over the past decade, Martinsville had the highest unemployment rate of any locality in Virginia, with an average rate of 11.9 percent from 2001 to 2010, according to the Virginia Employment Commission. Henry County had the fourth-highest, averaging 8.7 percent for the same period.

Some of the farm’s research has been funded by federal, state and Virginia Tobacco Commission grants. And the company has many applicants per job opening. According to Franklin, people who live in the area make unsolicited applications at the office almost every day.

Over the past decade, about 10,000 jobs have been lost in the region, many of them outsourced. The tilapia farm has picked up a fraction of those people, including Jackson.

He grew up in a community named after the local furniture company, Bassett Furniture, graduated from Bassett High School, got a job making chairs and thought he might retire from there like some of his relatives, he said. When the plant closed and his job was exported, he studied at Patrick Henry Community College to become an electrician. After seeing the Blue Ridge Aquaculture fish trucks, he put in an application.

"It’s a lot harder work than I thought it was going to be, but I like my job," the 36-year-old father of four said after filling an aerated water truck with tilapia.

The company doesn’t publicly discuss its compensation plans, but its promotional materials say that it pays higher than local equivalent companies, and that it has an employee profit sharing program. Most of its management positions also are filled by local manufacturing veterans.

One of them is Martin Gardner, 40, a Martinsville native who worked in the Charleston, S.C., area and studied business in Austria before returning to his hometown, where he wanted to raise his children, he said.

"I was attracted to the opportunity for growth in the company, the focus on environmental responsibility and the possibilities for generating employment in our community," he said.

Another is Franklin, who studied economics at the University of Virginia and after graduating in 1988 saw many of his classmates move to Washington, D.C.

He said he returned to Martinsville to work at a bank and later worked at Bassett Furniture for 16 years. He witnessed the shuttering of several plants.

"It was heartbreaking," he said.

**Facing foreign obstacles**

Some of the key obstacles that Blue Ridge Aquaculture faces are the same forces that caused outsourcing of the region’s factories: cheap labor and more lax regulations overseas.

The company would not disclose its sales. What’s clear is the costs of raising tilapia in the U.S. exceed the price of buying imported frozen or fresh tilapia fillets. The average wholesale cost of a frozen fillet is $1.65 and a fresh fillet is $4.65, according to Tech food science professor Lori Marsh.

"The price of fillets from China or Thailand is so low that it is scary," Marsh said.

The company’s production -- and employment -- growth prospects include expanding to a plant that would produce 10 million pounds of tilapia per year. That way, it could raise the fish with lower overhead costs and compete with cheaper tilapia fillets being imported from Central and South America, Franklin said.

The company also recently built a cobia farm in Salville and a shrimp farm in Ridgeway. The shrimp farm, which cost more than $4 million, broke ground in 2007 using technology that involves feeding the shrimp protein from the tilapia waste. It still is in the research stage, but the company has said it could support as many as 600 local jobs if it were to reach full production.

Blue Ridge Aquaculture "is important to us," said Leigh Cockram, vice president of the Martinsville-Henry County Economic Development Corp. "They’re always trying to innovate and grow their business, which will mean growth and capital investment for our community."
For Franklin, one reason he joined the company in 2007 was because he saw he could be part of a company that generated instead of cut jobs.

"We want to create jobs so kids when they graduate don't have to go to Richmond or Raleigh to find a job," he said. "We have to be flexible. We have to help our community come back and reinvent ourselves."

For now, in a community where unemployment seems to touch every family, local innovators such as this one are only part of the recovery.