

A Picture's Worth a Thousand Prawns

Robert Boyd, Cobden, Illinois

Alternative Agriculture in
Southern Illinois

Coordinator: Robert Boyd

Location: Cobden, Illinois

SARE Grant: \$2,530

Grant Year: 2001

Project Number: FNC01-382

Robert Boyd produced a polyculture of freshwater prawns and rainbow trout for retail sale. He also formed the Shawnee Freshwater Prawn Growers Association and developed an innovative way to harvest prawns.



...ABC News covered
the festival...

All it took was a picture. "One look at one of those blue claws, about 18 to 20 inches long, and I was captivated," says Robert Boyd, who owns 34 acres of non-tillable land in Cobden, Illinois.

Boyd saw the photo of a local teacher's freshwater prawn in the newspaper and was instantly hooked. He went on to receive a SARE grant in 2000 to produce a polyculture of freshwater prawns and rainbow trout for retail sale.

Using 10 acres of his land, Boyd's aquaculture system consisted of an indoor nursery for juvenile freshwater prawns and two ½-acre ponds, which he stocked with prawns from June until harvest time in September. From September through May, he stocked the ponds with rainbow trout.

The grant covered the equipment, juvenile stocking, and feed.

Prawns are very large shrimp, which can reach sizes of 22 inches long. Boyd explains that freshwater prawns have advantages over marine shrimp, being higher in protein and lower in fat and sodium. They have sweeter, denser meat than shrimp, with a taste closer to lobster. They are also absent of iodine, allowing many people who are allergic to shellfish to eat them. In fact, Boyd has a friend who is extremely allergic to shellfish but was able to eat his prawns without a reaction.

"He said they tickled his throat a little bit. But any other time, if he just touches marine shrimp, he'll swell up," says Boyd.

However, Boyd cautions that an allergic reaction to prawns is still possible, because

iodine isn't the only trigger. In some cases, a particular enzyme found in the prawn or shrimp can set off an allergic reaction.

Boyd says his aquaculture system, which has now shifted to largemouth bass, is environmentally friendly. He buys only feed with natural ingredients and uses no chemicals or antibiotics. He also says he is a year or two away from becoming organically certified.

Boyd did not follow the traditional method for harvesting prawns, which is to drain the pond at one end and haul them out by hand. With such a system, a lot of mud gets caught in the prawns' gills and can require hours of purging to clear out all the mud.

"That really diminishes the quality of the prawns," he says.

Instead, Boyd and Chris Breden, a field technician with the Illinois Fish Farmers Coop, pioneered the use of an external catch basin. They inserted a 12-inch drainpipe at the deepest part of the pond, making it possible to drain the prawns into a catch basin that was created using a 750-gallon septic tank. This system puts far less stress on the prawns.

"It was a very economical way to get what I was trying to get done. And it worked perfectly," he says.

During his first year of production, Boyd stocked 16,000 freshwater prawns in the two ponds and harvested 700 pounds; and each year after that, his production has increased. In his most successful year, he stocked his ponds with 20,000 prawns and harvested 1,000 pounds.

In 2001, Boyd formed the Shawnee

Freshwater Prawn Growers Association, which started out with nine growers who came together to obtain cheaper prices on feed and share information with each other. Boyd and the other prawn growers in the area also held extremely popular festivals during harvest time to sell their prawns live.

People traveled from all over the Midwest to join in the festivities, including four elderly women from Kentucky who came every year, set up their lawn chairs, sipped wine, and dined on shrimp gumbo and shrimp kabobs. Boyd would sell 120 pounds of shrimp tails on kabobs in four hours.

He drew over 600 people to some of his festivals, which featured live music, wine and vendors. The festivals also drew national attention, with articles showing up in *USA Today*, the *Chicago Tribune*, the *Washington Post* and other publications. In 2002, ABC News covered the festival, airing the story on "World News Tonight with Peter Jennings."

By 2003, the Shawnee Freshwater Prawn Growers Association had grown to 66 members and Boyd taught a class at Shawnee College on prawn production.

But in 2004, the state government shut down the state-of-the-art fish processing plant in Pinckneyville, which Boyd says nearly killed the prawn industry in Illinois.

After the plant closed, the Freshwater Prawn Growers Association dropped back down to less than 20 members. Today, the only people who still produce prawns in Illinois are those who continue to host harvest festivals, selling all of their shrimp live.

Although Boyd is no longer among those still producing prawns, he considers the prawn/rainbow trout project to have been extremely successful.

"I determined that in a time when corn, soybeans and other conventional farming commodities lack the profitability needed to make maximum use of small acreages of ground, alternative agriculture products can be profitable," he says. "Small family farmers can add considerably to their financial income for a reasonable amount of cash outlay up front."

By Jason Peterson