

Shallow Water Indoor Shrimp Farm

Growing shrimp in super-intensive, stacked raceways is not only cost effective, it also produces bigger and better shrimp. The one-ounce plus, jumbo shrimp are produced at a world record rate of up to 55 lbs./cu. meter of water.

"Putting shrimp production inside gives you complete control of light and temperature," says Addison Lawrence, professor, AgriLife Research Mariculture Laboratory (ARML), a Texas A&M research facility. "You also have complete biosecurity so you decrease potential disease concerns."

The freshwater system eliminates concerns over shrimp pulled from polluted water. Lawrence notes that most shrimp eaten in the U.S. are produced in Southeast Asia and frozen anywhere from 2 to 4 times. He adds that shrimp grown in open ponds require antibiotics sometimes banned in the U.S. Domestic shrimp farmers can't compete with the multi-crops per year of tropics-based producers.

Lawrence says that all changes with his prototype system that has four columns of raceways stacked four high, with an average water depth of 5 to 7 in. Baby shrimp are started in the top level raceway and move downward as they grow. The shallow water system makes

stacking possible, and that gives Lawrence the economic potential needed to justify the investment.

"A domestic producer with traditional ponds can harvest around 20,000 lbs. of shrimp per acre," says Lawrence. "Properly run, our system can produce up to a million pounds of shrimp per acre."

ARML is the oldest shrimp research facility in the country, and Lawrence has worked on aquaculture systems for 50 years. "The most difficult aspect of developing this system was proving shrimp could actually produce in shallow water levels," he says.

Lawrence hopes the first production-scale system will be started within 12 months. The system and technology have been licensed to Royal Caridea in the U.S.

"It's difficult to determine how much the system can be downsized as economy of scale is affected by the margin per pound produced," says Lawrence. "If a farm has an outstanding marketing program, it has a good chance of success."

Contact: FARM SHOW Followup, AgriLife Research Mariculture Laboratory, 1300 Port Street, Port Aransas, Texas 78343 (ph 361 749-4625; smpall@yahoo.com); or Royal Caridea, LLC, 603 S. Mays St., Round Rock, Texas 77864 (ph 916 616-7038; Meese404@gmail.com).



Growing shrimp in stacked raceways is cost effective and also produces bigger and better shrimp, say Texas A&M researchers.



The freshwater system eliminates concerns over shrimp pulled from polluted water.



Melissa Crisp and her father Tom design heavy-duty, hand-crafted fire pits. They come in a variety of beautiful designs that can be customized.

Hand-Crafted Fire Pit Business

A rural Ohio family of craftsmen launched a profitable business making fire pits that are as enduring as they are beautiful.

"We only use American-made steel – and recycled steel whenever possible," explains artist Melissa Crisp, who designs and does much of the freehand plasma cutting. The heavy steel often comes from discarded metal storage tanks.

Crisp says the first pits they made were for the family's own use a couple of years ago.

When they started attracting interest, she came up with more designs. Her father, Tom Appel, searches for the steel, welds, and helps with plasma cutting. Her mother, Marlene, takes photos and runs the office and website. And Jason, Crisp's husband, who owns a welding business, also cuts and welds.

The fire pits are 30 and 36 in. in dia. and treated on the outside to develop a hard rust coat, which lasts longer than paint.

What sets Appel Fire Pits apart is that they are heavy duty (3/16-in. and 1/4-in. thick steel) and designed to last for decades. Crisp says. Plus, they come in a variety of beautiful designs and can be customized.

"I would have never guessed that I would love steel," says Crisp, who has always been an artist. With the plasma cutter she cuts graceful curves for "Sand Dune" and "Ocean Fire" dolphins; jagged edges for "Forest Fire;" and patriotic eagles, stars and Liberty Bells for "Freedom Fire."

She recently added four new designs to the family's growing line of pits that start at \$660 (including shipping in the continental U.S.) and top out at \$1,140 for special orders. All fire pits have a lifetime warranty and a numbered brass plate.

Contact: FARM SHOW Followup, The Fire Pit Gallery, LLC, 983 W. 3rd St., Niles, Ohio 44446 (ph 888 409-0020; www.thefirepitgallery.com).



Vinyl sign "wraps" for pickups, trailers and boats work great for anyone who's looking to promote their business or personalize their vehicles.

"Wraps" Make A Big Impression

If you want to promote your business in a way people will really notice, take a look at these vinyl vehicle "wraps" for pickups, trailers and even boats.

"They're real head turners and make a big impression," says Jessica Forcier, Hutchinson, Minn., who owns Crow River Signs with her husband, A.J., who designs and installs the vinyl sign wraps.

"Most of our customers are looking for something new to promote their businesses," she says. "They say our big wraps evoke an emotion, and whether people like them or not they make an impression. Our customers say they get a great return on their investment."

And don't limit the wrap to vehicles, she notes. Located in the state of 10,000 lakes, they have wrapped many boats, including one ordered by Viking football player Jared Allen to look like a tank. He is using it to raise money for his Homes for Wounded Warriors foundation.

"We're finding people want to wrap just about anything," she says, including snowmobiles, racecars, trailers, golf carts and even ceiling fan blades and bicycle rims. Though many customers use the signs to promote their businesses, others do it just to

personalize their vehicles.

The Crow River Signs website includes a wrap design studio to check out some of their designs. Or, customers provide logos and ideas, and the designer draws up a design for approval. After the vinyl is printed, it's laminated to extend the life of the sign for 8 to 10 years before it begins to fade. After thoroughly cleaning the surface of the item to be wrapped, the sign is carefully applied to be bubble free, using heat and other products. Check out the company's website videos to see how it's done.

Forcier adds that the wrap material is fully removable up to 5 years after installation; after that, the adhesive starts to make a more permanent bond.

Depending on the size and complexity of wraps, costs vary from \$1,500 to \$5,000. If a vehicle gets scratched, dented or needs repair, Crow River Signs can make patches. Customers can hire their own local installer.

Contact: FARM SHOW Followup, Crow River Signs, 300 Hwy. 7 W., Hutchinson, Minn. 55350 (ph 320 234-9727; www.crowriversigns.com).