

# Pond to plate

*Utilising their paddocks to grow Murray cod, a group of Riverina farmers are at the forefront of one of New South Wales' fastest growing aquaculture industries.*

STORY + PHOTOS NATHAN DYER

Standing on the edge of a dam surrounded by a sea of white cotton plants, Roger Commins slips a small net into the brown water and brings up a catch of green and gold Murray cod weighing about 700 grams each. "These have been in there for about seven months now," says Roger, smiling at the mass of writhing fish before returning the net to the water.

As a director of Murray Cod Australia, Roger is at the forefront of one of New South Wales' fastest growing aquaculture industries. "This has been tried over the years, but for various reasons it's failed or hasn't grown at the rate that it should have, but we think the time is now right," says Roger, who also farms cotton on the family's Whitton property, about 40 kilometres south-east of Griffith. That belief is being driven by surging domestic and international demand for the iconic Australian freshwater fish, as well as a new production system pioneered in the Riverina.

By using small, purpose-built dams to farm fish, rather than large pre-existing irrigation storages traditionally used in on-farm aquaculture operations, Roger says water quality can be controlled and disease outbreaks contained and treated much more quickly. Unlike traditional dam-based production systems that use paddle wheels for aeration, the company has pioneered a system of targeted aeration into each cage. "That makes for a very happy environment for the fish, and they're growing significantly faster than the traditional systems," Roger says.

This particular dam holds 15 megalitres of water and contains 12 nets, each with 2500 fish, which come in weighing 100g and go out weighing between one and two kilograms after 18 months to two years. An automatic system feeds the fish with special pellets. Cages are checked daily for mortalities, water quality and any signs of disease. And every two or three months fish are graded for size. "Murray cod are cannibalistic, so if you get big fellas in with little fellas the big ones will eat the little ones," Roger says.

The dam will produce about 28 tonnes of fish over a two-year growing cycle. With the wholesale product selling for about \$20 per kilogram, that's a significant on-farm income.

As well as improving survival and growth rates, keeping fish off the dam bottom using the net system removes potential for the muddy taste sometimes associated with wild-caught Murray cod, Roger says. He says the system's other great attraction is its environmental credentials. All water is recycled through the farming system with fish waste used to irrigate and fertilise existing crops, effectively creating two incomes from each megalitre used.

Roger sees other farmers getting on board as a way of diversifying and supplementing their incomes. "It uses very little water, you probably only spend an hour a day on the system, and you can net a significant return out of one dam," he says. "Our issue at the moment is that we can sell far more fish than we can grow, so we see great potential for it."

Fifty kilometres away on the outskirts of Griffith, managing director Mat Ryan is walking through a shed full of steel tanks and high-tech aquaculture equipment. Inside each tank thousands of Murray cod are growing out from their hatchling size of 1-2g to their dam-ready size of 100g. Known as a Recirculating Aquaculture System (RAS), the process uses oxygenation, water flow and natural organisms to clean the water and keep fish healthy. Nearly everything in the shed has been designed and manufactured in the Riverina.

A trained agronomist who left the family's wheat farm six years ago, Mat's journey to Murray cod farmer resulted from a search for an industry in which demand outstripped supply. "And aquaculture was one of the industries where I could see massive growth potential in the short- and long-term," he says. Mat and wife Bonnie looked into farming yabbies and trout before deciding on cod.

Six years on, Murray Cod Australia's Griffith RAS shed – with capacity to grow out 400,000 hatchlings annually –



CLOCKWISE FROM TOP: One of the purpose-built dams used to grow Murray cod on a cotton farm near Whitton, NSW; Murray Cod Australia managing director Mat Ryan with fingerlings; Murray Cod Australia's RAS shed near Griffith, NSW; Riverina farmer Roger Commins checks on cod at his Whitton cotton farm.



*Murray Cod Australia director Roger Commins holds a Murray cod taken from a dam on his Whitton property.*

is the hub of a burgeoning new industry. The company has recently listed on the Australian Stock Exchange and plans to expand operations to sell fingerlings and purpose-built cage systems to local contract growers. The company will market fish on behalf of those growers, managing the entire pond-to-plate process.

Although growing systems and new technology are crucial to success, Mat says another factor is perhaps more important than anything: the fish taste great. “They’re quite a fatty fish, which makes them very easy to cook,

and they’re a very versatile fish, so you can have them fried, deep-fried, barbecued, cooked whole or steamed,” Mat says. “And they have a very firm, white flesh, which is a desirable eating quality for any fish.”

The company’s marketing strategy is to sell Murray cod as a premium product to domestic and international customers. “We believe we’ve got a great opportunity to aim this fish into the high-end Asian customers and demand a premium for it,” Mat says. “It’s sustainably grown, it’s clean and green, it’s Australian and it’s a truly good eating fish.” Despite strong export potential, for now the focus is on meeting domestic demand, which far outstrips production. The company already supplies a string of local restaurants and more than a dozen high-end city establishments.

“My biggest worry when we got into this is that you don’t see Murray cod on menus,” Mat says. “But what we’ve realised is it’s not that people didn’t want it, it’s that they couldn’t get it,” he says, adding that there is no commercial supply of wild caught Murray cod.

With discussions already underway with a number of potential contract growers, the company plans to increase annual production from 150 to 1000 tonnes in the next five years. “We’ve got some hurdles to get over along the way,” Mat says. “But I’m a firm believer of biting off more than you can chew and then chewing like hell.”

