

Nelson company's half century **making the good oil**

The Golden Bay community will soon benefit from hundreds of thousands of dollars a year, thanks to being given a 20 percent stake in a major new mussel farm by the SMW consortium. Little-known family-owned Nelson company MacLab is a key player in the deal and in the mussel industry's growth in Golden and Tasman Bays. **Brendon Burns** reports.

PHOTOGRAPHY BRENT MCGILVARY

Jim Broadbent's curiosity got the better of him nearly 50 years ago; the result is a growing multi-million dollar nutraceutical business centred in Nelson.

It began in 1973 when the lanky Australian was visiting Auckland with his Kiwi wife Judy to see her family. Jim noticed a couple of people in white coats working in a small white building on Devonport wharf.

A self-confessed sticky beak by nature, Jim wanted to know what they were doing. Stuart McFarlane, a fisherman by trade, had been experimenting with mussel farming in the Hauraki Gulf. In 1971, he had been asked to provide samples of our native green-lipped mussel to a US Government-funded research project hoping to find a cure for cancer.

By the time Jim met him, the cancer results were negative but an anti-inflammatory response indicated the mussel could help in treating arthritis. Jim and his brother Bill had recently sold a business they owned in Melbourne and were looking to invest in something new. In 1975 McFarlane Laboratories Pty Ltd (MacLab) was established in Australia to sell Stuart's new product named Seatone. He had purchased a small freeze dryer from Cuddon in Marlborough and set about producing the first Seatone capsules.

After achieving moderate success in Australia, Jim went to London looking for opportunities in the UK. A family member worked with *Vogue*; she rang an old friend working for the largest-selling weekend newspaper and she ran a story. When it hit the news stand, there was an instant clamour for the product but none was available in the UK. Although any immediate benefits were lost, a smart PR company then helped develop a huge UK market.

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Research and development

MacLab has since invested millions of dollars into science and research proving the anti-inflammatory benefits of greenshell mussels for both humans and animals. This started with Scottish rheumatologists Drs Sheila and Robert Gibson whose Glasgow patients included one who had been sent Seatone by a New Zealand relative. They were so impressed by the improvement in this patient's condition they asked for samples of the product to trial it in other patients. When their study was published in 1980 it created another storm of interest in the UK, as well as New Zealand and Australia.

There's been more than 30 years of research funded by MacLab at the Royal Melbourne Institute of Technology by Dr Theo Macrides, a graduate of Oxford University in biochemistry, who became responsible for several patents and numerous research papers and is the world's foremost expert on the properties of perna canaliculus, the New Zealand greenshell mussel.

Japan's Professor Takuo Kosuge, a pharmacologist, worked with Theo and discovered that the anti-inflammatory compounds in the mussel were highly susceptible to oxidation, making it very difficult to develop a stable and consistent product. His team was tasked with solving this problem, and after many setbacks they eventually made a breakthrough that led to the development of Lyprinol (a patented oil extract using CO2 extraction technology) which is now the world's best-known and best-selling mussel oil product.

Eventually the Broadbents bought out Stuart McFarlane and MacLab moved in 1986 from Auckland to a small disused fish processing factory in Picton. MacLab's first centrifuge, to separate shell and mussel meat, was adapted from an old commercial laundry dryer.

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Jim recalls: “It was a frightening brute of a thing which threw mussel shell out the top and required all the staff to wear crash helmets and goggles. It also didn’t work!”

Son-in-law Mike Hallett designed new centrifuges and these were built by Nelson company Ansco. The Picton factory couldn’t recruit suitable staff due to the town’s small workforce, so the company relocated to Nelson in 2000 to purpose-built premises in Tāhunanui which now uses far more sophisticated processing technology.

Building momentum

MacLab financial controller Gary Rountree says the company remains a family-owned business employing about 75 staff, with around 40 at Pharmedex Extracts near Richmond which MacLab exclusively supplies with the mussel powder it produces.

“Pharmedex’s proprietary extraction facility converts this into its unique oil which is marketed around the world under brands including Lyprinol as an anti-inflammatory solution for people and Antinol for animals suffering from arthritis.

“Our production jointly accounts for a high percentage of New Zealand mussel oil exports which are currently worth around \$40m to New Zealand, and growing fast.

“This is by far the highest-value use of the green-lipped mussel. In the last few years MacLab has more than doubled in size. We have reinvested almost every dollar back into the business to continue innovating and improving the product, which has enabled us to maintain this growth.

“In the last three years alone, MacLab has invested the best part of \$20m to lift production and we expect to continue to build momentum,” says Gary.

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or buys around 8000 tonnes of mussels a year – about eight percent of national production. While the majority to date has come from marine farms in the Marlborough Sounds, increasingly the mussels will come from Golden and Tasman Bays.

Looking ahead

The family-owned company was instrumental in the 20-year process which has now secured a 1000-hectare block 5.5 kilometres off Parapara in western Golden Bay for the SMW consortium – Sealord, MacLab and Westhaven group. In seeking consent, SMW committed to give space to local residents and in October signed agreements confirming the income from 160 hectares will be used to support environmental, education, health and other charitable causes in Golden Bay.

Further benefits are also provided to iwi, who gained 20 percent of the approved water space. The first lines are already in the water and the first crop of greenshell mussels is expected to be ready for harvest from late next year with increasing production from 2024/2025.

That will be 50 years since Jim Broadbent’s curiosity got the better of him. And thank goodness for that.



Photo: Supplied

From top: Clockwise - removing mussel meats from the shells; preparation for processing; Jim Broadbent, centre, his nephew Andrew, left, and West Coast-Tasman MP Damien O'Connor launching MacLab’s new vessel, *Vanguard*

Opposite page: MacLab financial controller Gary Rountree

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