## Ferment to be

Two Wellington friends with a passion for beer-making have discovered the missing ingredient in Kiwi brewing – and it has the local industry fizzing.

## STORY MICHAEL DONALDSON



YEAST IS THE most ancient beer ingredient but also the most recently discovered and perhaps the least understood. It's only in the past 140 years that pure yeast strains have been isolated, starting with the Carlsberg brewery in 1883. Given beer's almost 10,000-year history, it's fair to say yeast has been an overlooked, misunderstood and under-appreciated ingredient.

Maybe that's why it took so long for a commercial New Zealand yeast business to start. But, like a good ferment, Froth Technologies is bubbling away strongly after just a couple of years in business. Late last year Froth picked up the Innovation trophy at the New Zealand Food Awards. The awards recognised not only the innovative thinking behind the business, but its sustainability practices and business excellence.

New Zealand craft breweries have relied on imported yeasts from Europe and the US, and unlike our hops and malts, there was no locally made brewing yeast sold commercially. It also meant any New Zealand-made beer could never truly call itself a local product.

The benefits of having a commercial yeast lab in New Zealand are huge but it wasn't something Froth founders, Ryan Carville and Simon Cooke had considered until they thought about setting up a brewery together. From a sustainability perspective, there was a downside to not having locally made yeasts.

Yeast is a living perishable product and has to be air-freighted to New Zealand in a cool state. Not only is the exercise expensive, but any delays or glitches in shipping or customs could affect yeast health and impact the final product. "We saw a gap in the market," Cooke says, "a missing piece of the puzzle, and that's when we thought 'we could do that!."

Seeing a gap and going for it are two different things, especially as they didn't have a background in microbiology. Cooke previously had a small brewery called Kakariki, while Carville worked for Garage Project. The friends and flatmates had home-brewed together so they understood the basics of yeast health and propagation.

"There's a good amount of yeast propagation info on the web," says Cooke. "You can learn how to grow yeast in a flask as a home brewer but applying that to an industrial manufacturing setting, to do it in 1000L batches, concentrate it, homogenise it... there's been a lot of problem-solving around that stuff."

The seven strains of yeast Froth sells have been propagated from internationally available yeasts. Yeast strains are not protected by intellectual property laws and in the US there's no patent protection for micro-organisms, which allowed them to create their own versions of well-known strains, giving them funky new names such as Krisp, Vape, Buddy and Vagabond.

In a business sense, they were careful not to over-extend early on. "We were conscious of not assuming our idea was the great idea or the perfect idea that would automatically translate into success," says Carville. They did a lot of legwork, talking to breweries and asking them: "Would a yeast supplier in Aotearoa be a good idea and what would you like to see from that?" There were enough people saying 'yes' to allow the pair to take small steps initially, renting a commercial kitchen in central Wellington to produce the first small batches of liquid yeast.

"We haven't invested that much in traditional marketing," says Cooke. "We haven't wanted to grow faster than we could keep up with. We were lucky to get the support from a number of experimental and innovative breweries early on. We wanted to build those relationships because they have influence in the industry."

The collaborative nature of craft brewing in New Zealand means brewers are happy to share success stories, so word of mouth recommendations are invaluable. "When brewers hear from other brewers that our yeast has made their product better and their lives easier at work, that helps us," Carville says. They now have 40-plus breweries using their yeast, including big players such as Emerson's, Garage Project, Sawmill, Deep Creek and Urbanaut.

The biggest challenge has been the pioneering nature of the business. They had no-one else in New Zealand to learn from, but it helps that the pair have a good creative-technical skills split. "Simon is an ideas guy," Carville says. "He is good at finding solutions to things. He's got a really good brain for outside the box. I'm more process and detail oriented and that balance works quite well." While their big idea hit a few hurdles, including a first commercial batch of "very dead" yeast, in retrospect it feels like a no-brainer for the times.

"Sustainability" is no longer a buzzword; it has real implications. "We are seeing a lot

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more breweries caring about sustainability – if you're B Corp certified, like Sawmill, you have obligations there," says Cooke. "We're also seeing the first carbonzerocertified beers. When breweries think about who supplies them and where their ingredients come from, we become more and more attractive."

When the pandemic hit and international shipping was disrupted, being local had an unexpected upside. Froth was only weeks old when Covid appeared. "In the current climate a local business offers some resilience when the supply chain is threatened. It wasn't something we considered when we first thought about this business, but it quickly became apparent." Carville says.

Sustainability doesn't stop at being local. Froth delivers only liquid yeast as opposed to dry yeast. "It's quite energy intensive to dry the yeast, only to rehydrate it again at the brewery," Cooke says.

Of course, having a great idea, learning the ropes at pace and upskilling on the job aren't worth much if the product is not up to scratch. As it turns out, Froth yeasts deliver on quality. At last year's Brewers Guild Awards, three of the 12 trophy-winning beers were brewed with Froth Tech yeast: Emerson's Bookbinder, Waitoa Afterglow Hazy IPA and Alibi Temna Zima dark lager.

In terms of business goals, making better beer in a sustainable fashion is key. "We want to see the New Zealand craft beer industry be not only the highest quality in the world but also the most sustainable," says Cooke. *frothtech.co.nz* @



 Ryan Carville (left) and Simon Cooke.
The company stocks seven strains of yeast.
Carville at work in the propagation facility.



MAHURU WILCOX, FOUNDER, HAU BOTANICALS

## Nature & nurture

When did your launch Hau Botanicals? It launched in September 2018 after a turning point in my life. I've always been a high achiever who cares deeply about her work in environmental research and supporting other Māori within this space. I was travelling and juggling a number of projects, but not taking care of myself. Around the same time, I experienced the loss of two pregnancies, which really shook me. I had the proverbial handbrake wrenched on, so I turned to what made me feel happy and at ease - being in nature. Learning to move at a slower pace encouraged me to look at other ways of including my passion for our taiao and rongoā teachings.

What is Hau's point of difference? I encourage people to understand the plants and products I create, and savour them as part of a small personal ritual. Using less but honouring more is not typically thought of as a good business model. For me, sharing my knowledge

and sparking people's interest in our incredible native plants is more important. I love sharing the mātauranga I've learnt from nearly 20 years of study and work in environmental science.

## **Biggest achievements and challenges?**

My biggest achievement has been surviving a pandemic and the first two years of being a māmā, working part time as a Māori researcher for Manaaki Whenua, all the while keeping Hau Botanicals alive. It has been a journey, so I'm proud of myself for making it through with my sanity. Of course, I have the support of my amazing whānau and tāne. haubotanicals.co.nz