As New Zealand's craft distilling industry grows, so too does the collective passion of those involved. We talk to the couple behind Taranaki's Juno gin, whose aim is to help enhance locally made gins and the country's distilling community as a whole.

THE GROWTH of craft distilling in New Zealand has been exponential in recent years. While just a decade ago it was still reasonably surprising to find a locally made spirit on the shelf, today New Zealand distillers are putting their twists on everything from whiskey to liqueurs, vodka to vermouth, and the current darling of the spirits world: gin.

Jo and Dave James of Begin Distilling in Taranaki are part of the more recent wave of distillers, launching their Juno brand gin in mid-2017, but they have already become a driving force in the industry. While Juno has found early success (see page 34) the James' have also released the first research into New Zealand gin descriptors; they are working closely with local horticulturalists on growing botanicals; they're preparing to launch a research project into growing juniper in New Zealand, and they have been instrumental in helping to launch the new industry group for New Zealand craft distillers, Distilled Spirits Aotearoa.



Put simply, the pair are passionate advocates for the 'New Zealand' brand and believe the local craft distilling industry has an opportunity to play to its strengths with an open and collaborative approach.

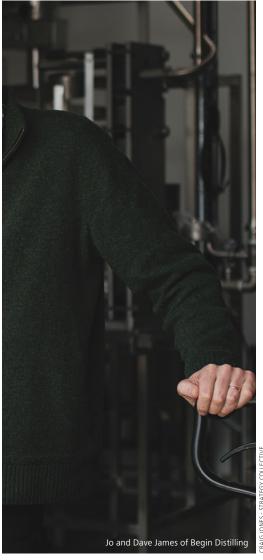
To this end, Begin Distilling has been working with others to establish Distilled Spirits Aotearoa (NZ) Inc, a new industry group for New Zealand craft distillers that will be a voice on issues around education and legislation. It became an incorporated society in September and is now taking membership applications. (See more on page 14.)

The collaborative approach is also cemented in their own company values. "There are three," says Jo James. "Make it fun, make it together, and make it right. The 'making it together' is about collaboration and that's not just Dave and me; that's working with the community, working with local horticulturalists, with our local chamber of commerce and branding and marketing companies."

Looking for local

While using locally grown ingredients is a key part of the Juno ethos, Jo admits that finding what they need for their gins has been a mixed bag. "Some of it was random chance and I think that's by being very open and talking about what we want to do. New Zealand is that amazing place where everyone knows someone who's doing something - so then it's following up those recommendations. We've been working with a great couple of young people at Kaitaki Farm in Oakura and they were very prepared to grow experimental crops for us. Ditto with Saffron Patch on the East Coast who were really interested in exploring the orris root. Then there's our juniper project and there's been such a huge groundswell of enthusiasm for that from Massey Uni and from other distilleries."

The 'juniper project' is a big focus for the James' who want to establish juniper here as a commercial crop, rather than relying on product from the



Northern Hemisphere, where it is sourced predominantly. Dave James explains that its provenance is often unknown as the berries are collected from the wild by those who apply for

"It's not a managed orchard," says Jo, "it's an individual council giving out resource consents which is, 'precarious' is too strong a word, but I think it means there are risks for ongoing juniper availability when that kind of crop management isn't happening."

resource consents, then sold to distillers

or distribution companies.

Having a locally grown and managed crop also becomes more important with the growth of New Zealand's own gin category in the global boom and the inevitable rise in international demand for juniper.

Project Juniper

Jo and Dave both come from science backgrounds (Dave has worked in the food industry, has a background in sustainability and lectured in distillation in Australia) and they are comfortable in the world of scientific research. Over the summer of 2017/2018 they commissioned an extensive literature survey through Massey University to show the benefit of juniper trees and applied successfully for funding from AGMARDT for the next stage, part of which is finding existing trees in New Zealand.

"They are used here as ornamental plants," says Dave. "They were brought here in the 50s and 60s but people didn't realise that there were males and females, so they were separated throughout the country. What we're looking for specifically is the Juniperus communis Linnaeus species and we want to find males and females for those. We know there are a couple around in botanical gardens – Christchurch and Nelson have got some; Massey University has some and we know there are some in Auckland as well. Our major drive is to determine whether we've got enough genetic diversity within the juniper population here to allow us to be commercially viable."

The goal is to propagate from those trees to establish a commercial venture. Dave says the trees produce 'berries' in three to five years and can grow to about 150 years old. He says the potential is exciting. "They're an inter-generational crop and they're quite hardy. My background is sustainability and animal dairy and one of the areas we probably aren't as good at is shelter belts for cattle. So a cropping shelter belt is quite an attractive proposition."

There is also the opportunity to earn carbon credits for planting juniper, as its cone crop (i.e. not a fruit or nut) doesn't exclude it from the Emissions Trading Scheme (ETS).

Jo and Dave are now working alongside Massey University and West Coast-based newcomer Reefton Distilling and will soon launch a citizen science project through the iNaturalist New Zealand platform for members of the public to help identify the juniper trees. "It's a student project, so we'll be sending

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students out to sample the tree and then it'll go through the DNA sequencing laboratory programme they've got at Massey," says Dave. "Once we've done that we'll look at teaching propagation."

Another interesting aspect of the project is the opportunity to compare New Zealand-grown juniper berries with those from overseas. Dave says Massey has developed a methodology to extract the essential oils and active ingredients from the cones. "Potentially, there are some fertilised cones out there. We can put them through this methodology and compare them against the off-shore sourced cones to make sure we've got comparable or better efficacy in the propagation that will lead the species here."

He says they've already compared volatile oils from locally grown and foreign coriander seed and found the efficacy is higher in the New Zealand product.

Botanical terroir

It's this concept of 'terroir' in New Zealand-grown botanicals and their potential for flavour profiles that differ from overseas-sourced ingredients that really excites Dave and Jo. "It's such a great scoop for New Zealand horticulture. We're finding similar things happening with the orris root, and the angelica root

The juniper berry

Although known as berries, the juniper berry is actually a fertilised female seed cone from a juniper tree (a type of conifer found predominantly in the Northern Hemisphere). It is an unusually fleshy cone, which gives it a berry-like appearance.

Male and female trees must be relatively close for fertilisation to occur. Cones from the Juniperus Communis are the ones used most commonly to give gin its distinctive flavour.

is a fantastic case study too," says Jo. "We worked with a seed company to bring in angelica archangelica seed from Germany and we've had that grown at two different sites in Taranaki. The roots from the two sites have yielded completely different flavour profiles and are different colours from each other. So, instead of getting our angelica root from Bulgaria, we're getting ours from up the road."

Learning a language

The rapid development of New Zealand's gin industry meant the James' also saw a gap for a lexicon to describe the Southern Hemisphere flavour profiles that were becoming more evident as distillers experimented with local citrus, herbs and native ingredients such as Manuka, kawakawa and horopito.



Juno Gin

The Juno range includes Juno Extra Fine Dry Gin and four small batch limited seasonal releases, which Jo James says will reflect each year's growing season. They also work on smaller experimental releases, such as a barrel-aged called Styx, which was released for spring.

Recent accolades for Juno Extra Fine Dry Gin include a Bronze Medal at IWSC 2018 and a Silver Medal at the San Francisco World Spirits Competition 2018, as well as a Double Gold Medal at SFWSC for its packaging. Juno gin is also exported. "Our major drive is to determine whether we've got enough genetic diversity within the juniper population here to allow us to be commercially viable."

They engaged Massey University researchers to find the most common terms used to describe 22 New Zealand gins (local distillers offered samples of their gins for the research) and included international brands Gordon's and Bombay Sapphire for comparison purposes.

Jo says they felt it was important for consumers to have the language to describe what they were tasting and how and why each one was different. "It was really thinking that if we build a language we build customer confidence and the ability to understand why they would want a boutique gin as opposed to perhaps what they might normally buy. It was offering that opportunity to have good, meaningful conversations when it came to talking about New Zealand gin.

"Also, when you look at a [gin] flavour wheel, they tend to be very Northern Hemisphere-centric, and I don't know about you but I've never tasted birch sap in my life. They can be great descriptors, but often they're not applicable to a Southern Hemisphere palate."

Massey University released its findings¹ in August and Jo says a key point was the dominance of citrus. "Consumers are really comfortable talking about citrus flavours – they enjoy that in their gin and it's something that they look for, but they haven't necessarily broken it down into aspects of citrus. When you think about the difference between a mandarin and a lemon and a lime, or even a lime and a kaffir lime, they're vastly different profiles, so there are some lovely generic terms that could be broken down more finely."

The couple hopes the study will be used by New Zealand distillers to better market their product and to develop a sensory toolkit, which will be relevant for the wider global market, and to better understand how New Zealand gins compare internationally.

"We're not being private in this, we're making it open-source because we feel that the benefit here is to the NZ Inc.

brand," says Dave. "There's a saying that 'When the tide comes in all the boats go up' and from our point of view we feel that this is a classic example of that."

Raising a glass to the future

The couple's work with local growers is already showing results. "We've been very open and it's having a real impact," says Jo. "The horticulturalists we've been working with have had three or four distilleries approach them for ingredients so that is just huge, I think that's such a boon for everyone."

"Our vision is that New Zealand becomes a powerhouse for these ingredients at a world level," says Dave. "Here in the Pacific, everything normally comes from the Northern Hemisphere, so the opportunity to move it out of here is more sustainable. It just seems like the right thing to do and it adds a bit of diversity to New Zealand's agricultural offering to the world."

Jo readily acknowledges that some ingredients are less suited to New Zealand's climate, but even then there is no dampening her optimism. "Black peppercorns, cassia, nutmeg, cinnamon; [these are] things that require tropical conditions to grow. But there's no denying that we have some microclimates where they're starting to grow some more unusual and interesting things, so I think anything is up for possibility."

The interview for this story took place just days after the news of New Zealand gin Scapegrace Gold winning Best London Dry Gin at IWSC 2018, and the win only serves to reinforce the James' belief in the importance of local distillers seizing their moment. "If you look at the medals and awards that New Zealand gins are starting to collect, it's really exciting," says Jo. "Especially on the back of Scapegrace's wonderful win. New Zealand is definitely arriving on the world map as a place to look to for quality spirits."

¹ Hort, J., Gilliland, J., & Middleditch, N. (2018) "Developing a Consumer Lexicon for New Zealand Craft Gin". *Massey University*.