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APIARIST'S ADVOCATE

News, Views & Promotions – for Beekeepers – by Beekeepers



Fire, Flood and Disease

New Zealand Honey
Producers and
Exporters Face
Varied Foes

Coronavirus Disruptions Could Have Silver Lining



New Zealand's honey trade has been less impacted by global disruptions associated with the coronavirus than many other industries. However, as a major consumer of New Zealand honey and hive products, the upheaval in China caused by the virus has been felt in varying manners. It may not be all bad though, according to a selection of exporters reflecting on trading in January and February and looking ahead to March and beyond.

With hundreds of staff in China, Comvita's first priority was for their welfare when COVID-19, more commonly known as coronavirus, hit in January and cities were put in to lockdown. "We have over 250 staff in China," says Tony Wright, general manager market access for Comvita.

"Our first concern was to make sure they were looked after. To date, none of our staff or their families have been infected. They are safe and well, but it is a massive disruption for them."

The disruption on the people of China has been substantial and the ripple effects have been felt worldwide, including among New Zealand's honey exporters. Some have had freight into China held up, including King Honey.

"We are a young business and it has hit us pretty hard because we have focused a lot of our business on the Chinese market," says Chris Bowman, King Honey chief operating officer.

"We were prepared for a big order in January, normally we would get 50 percent payment before it left and 50 percent the month following. Unfortunately, that is still in our shed taking up space and they can't confirm when they can take it because of the reduction in port staff."

Flights in to and out of China have been affected too, with Richora Honey export coordinator Jessica Dong saying that is a method they would usually use.

"Space is so limited and everyone is competing for it. It is so expensive that you can't get it really," Dong says.

Comvita had well stocked warehouses in China prior to coronavirus striking and so port hold-ups have not been a chief concern for the company, Wright says. However, both Comvita and fellow major honey and wellness product exporter Manuka Health say they have had delays with delivery issues inside China.

"The challenge has been in China, particularly with what they call the last mile – getting goods from our distribution centres to consumers. A lot of courier companies, and small freight, who deal with that next level of distribution, don't have staff. They are all at home. We need that to get back to normal," Wright says.

Despite the disruption to freight, Wright says there has been some "remarkable" buying behaviour.

"There has been a shift in the pattern of sales and we have seen the tenacity of the Chinese consumer where, if they can't get it from somewhere, then they will go somewhere else. It is interesting to see how inventive they get."

At King Honey, Bowman says they heard of one courier office in Wuhan, the city when coronavirus was first discovered, that was holding 60,000 orders of manuka honey waiting to be distributed.

"When the curfew was on people panicked and went to the Web to get honey. That probably cleared a lot of shelves, with shops trying to get product out via courier. Then that got blocked off as well, but when those barriers get removed, I think we might see a bigger demand for it again," Bowman says.



Keeping the shelves of Chinese stores stocked with honey, such as this BeeNZ product, has become increasingly difficult following the outbreak of coronavirus.

Photo: BeeNZ.

Major exporters, Comvita, Manuka Health, King Honey, Richora and BeeNZ all say they have seen, or been informed of, an increase in demand from consumers in China in recent weeks, which they put down to the impact of coronavirus.

"We talk regularly to our distributors up there. They are saying the shelves are emptying fast and the Chinese are buying manuka honey. Anything that is assisting the immune system support, against the virus and the common flu, is popular," Bowman says.

That extends beyond honey.

"Propolis is well understood by Chinese to have immune supporting properties and we are seeing a big surge in demand for our propolis range," Wright says.

With the death toll plateauing and restrictions on movement in China being lifted entering March, there is hope among exporters that freight channels will return to normal and honey sales will continue to be strong, but most expect it to take at least a few weeks.

"We are hoping that when everything opens up again some of these orders will get even bigger so the shops can fill their shelves again, because everyone has panic bought," Bowman says.

At Comvita, despite some disruptions with distribution of their product, it is still the wellbeing of staff, who work mainly in marketing, sales and distribution roles, that is foremost according to Wright.

Empty streets in China are resulting in difficulties for New Zealand honey sellers to distribute product in what was a \$63.5million market in 2019



"The main thing for us, when it does all start to normalise, is that our staff can get back to normal too. It will take time, maybe a few weeks, but it is good seeing things heading in the right direction. It is a big relief." 🐝



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Washed Away



The timing couldn't have been worse for two Southland beekeepers when flood waters washed away entire apiaries of their hives in early February. As well as their financial loss, they detail the emotion involved with picking up the pieces following a natural disaster.

"It is amazing how emotional a loss is," says Shane Bocock, owner-operator of Greenfield Honey's 300 hives in Southland.

"You put your heart and soul into these little fellas to keep them going and when they are going well there is some degree of satisfaction, but when they are dead in an event like that, it really hurts. The clean-up is not something to be celebrated."

Bocock lost 16 hives, over two sites, when the Pomahaka River, a tributary of the Clutha in South Otago, came up suddenly following heavy rains in the first week of February. Nearby, Glass Brothers – whose owner Carne Clissold was profiled in last month's *Apiarist's Advocate* – lost 20 hives.

"We had 20 filled with comb honey, honey supers and all washed away. The whole thing gone and we were picking up gear downstream. You do find a bit of gear but it is silt-filled, the honey is gone and you have lost all your livestock," Clissold says.

Bocock, who is in his third season with Greenfield Honey, said they had a scare in November 2018 on one of the two sites.

"Last time it came through it was November and I was just about to put honey supers on. This time they were production hives in good strong areas. I had honey supers on and I had only just supered up again," Bocock says.

After the 2018 scare, Bocock resited the hives, taking advice from the farmer whose land they were on, but it was not enough.

"The Pomahaka in flood is a powerful piece of work. It usually flows at 20 cumec and it got up to 860," Bocock says.

"When I went to check them out, there was no way I could safely retrieve them before they were washed, absolutely no way. It was too dangerous."

Clissold also said he had no chance to save his hives, with the Pomahaka coming up too quickly and his time occupied with more pressing matters.

"I got home from my night-shift work at four o'clock in the morning and I am with Search and Rescue, so got called up that morning to evacuate people from homes and that sort of stuff. I was busy doing that."

Glass Brothers have had hives at the site which was washed away for 30 years previous without having an issue with flooding.

"The yard is fenced, so the water has come through and floated the hives up and over a fence. They had honey on too, so they were not feather-light and shouldn't have floated well, but they seemed to."



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Following recession of the flood waters, both beekeepers were forced to search for their hives downstream, a challenging task.

"There is nothing worse than walking down the river and seeing your box up in a tree. It must have been about a kilometre from the apiary I found two brood boxes, a honey super and a comb box, all stuck together. Not only was I pretty gutted about it, but it was physically tough getting it down," Clissold says.

Both beekeepers say working through the recovered hives is a messy task, with silt filling many frames and limiting their value.

After two floods in two seasons, Bocock has decided not to return hives to his two sites, but says that is a shame.

"They are strong build-up areas and we rely on them to get our numbers back up after winter. So it is a double-edged sword. You are attracted to the river site because you know how good they are for your bees and yet the river sites are the ones which can hurt you the most," Bocock says, adding "There is a learning curve for all of us there." 🐝

February flood waters
in the Gore area.
Photo: High Country
Helicopters



Left: Images of New Zealand's natural beauty, such as this photo available to tourism operators, will help form the New Zealand honey story. Below: The FernMark brand used on licensed New Zealand products.



A New Zealand Honey Story



As the New Zealand honey industry seeks to find international markets for non-manuka varieties, Apiculture New Zealand has not been sitting on its hands. A \$60,000 grant from New Zealand Story Group will see the international marketing experts work with the beekeeping body to tell “the wider New Zealand honey story on the world stage”.

“A first step, but an important first step” is how Apiculture New Zealand chief executive Karin Kos describes her organisations work with New Zealand Story Group.

“It is a real positive. Everyone talks about the dire-straits of the industry, but as an industry we need to do something about it and this is a very good opportunity to get on with it,” Kos says.

Late in 2019 it was decided Api NZ would benefit from a \$60,000 grant from NZ Story, a government agency funded by six government departments and tasked with helping Kiwi businesses market themselves, as proudly New Zealand products and services, internationally. Api NZ will also benefit from access to NZ Story's creative and marketing expertise.

"The result will be high-quality content and tools on the New Zealand story website that everyone can access. There will be a series of online tools, whether that is infographics, a key story itself, videos, a whole lot of materials that our beekeepers can use if they are exporting to the world," Kos says.

The Api NZ chief executive says they have no timeline for when resources will become available, but work with NZ Story got underway in February and they hope to have some resources available by the time of their national conference in June.

The NZ Story Group already works with and provides resources to many of New Zealand's leading industries, such as horticulture, wine and seafood. It also oversees the FernMark Programme, where exporters can apply to carry the FernMark on their products, to identify them as from New Zealand.

NZ Story head of engagement Sarah Morgan says she is excited to start working on the New Zealand honey story and that it goes beyond leveraging off the appeal of our great outdoors.

"When Karin approached us we said, 'honey industry, that is still a bit of natural beauty', because it revolves around that, but what I am fast learning about our honeys is our environment and regional differences in all the varieties we offer. Therefore, what are unique are the tastes, which seem to have been lost in the way we market and promote honey from New Zealand," Morgan says.

Manuka honey has long been the marketing focus and the move to work with NZ Story is a way to spread those efforts, Api NZ believes.

"We have neglected the other wonderful mono-floral honeys we have. This is the time to tell our wider story and lift our game," Kos says.

While the complete stable of New Zealand honeys will help form the "wider" honey story, specific marketing of individual honey varieties through the NZ Story Group is a while down the track.



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Source: New Zealand Winegrowers, 2020.

An infographic promoting the New Zealand wine industry. Soon Kiwi honey sellers will have similar tools at their disposal.



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"The first stage is, what are the nuts and bolts of our New Zealand honey story? What are the attributes that we have? We don't use antibiotics, we have strict biosecurity in place, we have an incredible biodiversity of floral sources that no one else has. It is about drilling in to tell that wider story. From there, I would be very keen to find out how we can go into the other native mono-florals, perhaps through regional stories," Kos says.

Morgan says she sees similarities between the New Zealand honey and wine industries, where manuka honey can play a similar role to sauvignon blanc, which established Kiwi wine internationally.

"Karin's quest is to find out how we can do a similar job for the honey industry and make sure we pull together to tell a compelling and consistent story when we are marketing our products offshore.

"From what I am hearing it is quite a fragmented industry and everyone is a bit insular and focusing on their individual brands rather than acting collectively. So that is the job for us, what is it that is true of all honeys regardless of the region or floral variety? What is it that is unique about New Zealand? Then people can tell their individual varietal and brand story after that," Morgan says.

For Kos, whose organisation saw their bid to place a commodity levy on the honey industry rejected in March 2019, says the \$60,000 of NZ Story funding is essential at a down time.

"It provides a foundation. It is tough times at the moment and anything we can do to lift the value and add a premium to our honey, we need to do." 🐝





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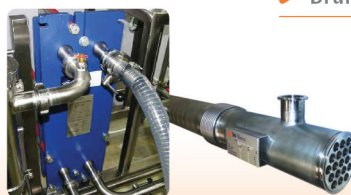


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Beekeepers Warned of Heightened Fire Risk



Beekeepers generally understand the fire risk, but due to the nature of their work, their work environments and an unusually dry season, the risk of starting a wildfire is greatly increased at present across much of New Zealand.

That warning comes from Fire and Emergency New Zealand amidst a prolonged fire season for many areas. February saw a prohibited fire season, and therefore a total fire ban, imposed on the North Island, except Wellington, as well as Nelson, Marlborough and North Canterbury. The ban is expected to extend well into March for most areas.

Fire and Emergency NZ manager rural fire Tim Mitchell says such a high fire risk is unusual for many parts of the North Island, and they are concerned people's habits may not be suitable in the changed conditions.

"A lot of those areas don't receive a high number of fire danger days a year. The dryness of the conditions and the danger level is high, well above what it has been previously for this time of year. The concern with that is, people may have been through dry periods before, particularly in the North Island, and still done activities and those activities not caused a problem. Because this year is quite different to previous, the risk is elevated and those activities, this year, could start a fire," Mitchell says.

"We want that North Island group to understand it is more extreme than it has been previously and it only needs one spark or a little bit of heat and it could ignite a fire."

Beekeeping activities can cause wildfire if caution is not taken, with smokers and vehicles having been ignition points for fires in previous seasons. Because of this, Mitchell advises beekeepers to carry out work early in the day when possible, with dews now becoming heavier, but to always be alert.

"The peak burning time, or dryness, usually comes at around three o'clock in the afternoon, but at the moment anytime is risky given how receptive the fuels are."

Smokers can still be used, even in a prohibited fire season, but if required there is potential for districts to impose notices banning "high risk activities" such as the use of smokers.

"At the moment, as long as people are acting sensibly, we don't want to get to an over-restricted state where we are producing big lists of things that are and are not restricted. As long as people are

Smokers should be placed on hive tops or bare ground, Fire and Emergency New Zealand warn

practical and sensible around what they are doing we will allow them to use good judgement and act as they are."

That means being careful not to throw embers from smoker fuel, and placing smokers away from combustible material such as long grass.

Vehicles can be another major cause of wildfire, and with beekeepers travelling through high-risk areas they need to be extra vigilant.

Older diesel vehicles can throw sparks or carbon from their exhaust. A regular maintenance programme is important for curbing this, while fitting spark arrestors over exhausts is advised. More modern trucks can also cause fires too.

"A big one is the temperature that a lot of the modern vehicles run at and the catalytic convertors that burn off residues run at

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very high temperatures. It is not necessarily where the vehicle runs through grass but when they stop to open a gate or check something. That can be long enough to get a build-up of heat," Mitchell warns.


Bash plates underneath trucks can also collect combustible material such as grass and seeds, so vehicles should be checked and cleared after passing through anywhere in which they could get clogged.

Beekeepers are advised to carry firefighting equipment, such as a shovel, 20 litre containers of water and a hessian sack.

The Kiwi beekeeper's biggest ally can pose a danger in the fire season too, Mitchell warns.

"Manuka and kanuka have resins which are a naturally volatile fire fuel. It is a scrub fuel, with a mix of medium but fine fuels and it does not take a lot to ignite. Once it does ignite it goes to extreme fire danger quickly. Even after rain it will dry to a point it is highly flammable again very quickly."

The fire season is starting later but going longer, and this summer it is expected to be high risk well into March and potentially early April. Rain and a resulting "green flush" is required to reduce the danger level in many regions but, until then, vigilance is required, according to Mitchell.

"Beekeepers should be well aware of the conditions. They drive through them, work in them, and we don't want them accidentally starting a fire as it will have a huge impact on their industry. If we all work together, hopefully we can prevent any wildfires from starting." 

Key Considerations for Beekeepers

- When lighting smokers, ensure nothing drops off the fuel onto the ground.
- Don't place a hot smoker on the ground unless it is bare earth.
- Have a 2kg fire extinguisher on sight, water in a knap sack sprayer is more effective than an extinguisher, so this is another option.
- Have a shovel, this will enable you to beat out flames or smother with dirt.
- Don't park vehicles in long dry grass, hot exhausts are a good source of ignition.
- No smoking.
- Watch out for trucks idling in dry grass while loading/unloading, some modern trucks have catalytic convertors which if they go into clean mode expel extremely hot gasses from the exhaust.
- If you do start a fire, regardless of size, ensure someone has called 111, the brigade can check the site and add additional water. If not extinguished properly the fire may reignite hours later after everyone has left the site.

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Honey Take Up



After a down season for honey production across much of New Zealand in 2018-19, some of the country's biggest beekeeping and honey buying operations are reporting more favourable crops this season. *Apiarist's Advocate* checked-in with the big players to get their take as the season moves towards an end.

Weather extremes have caused regional variance, but nationally beekeepers will likely return above average honey yields according to some of New Zealand's biggest producers.

Much of the country has experienced long periods with no or low amounts of rain this summer, meaning more flying time for bees. This, combined with a good manuka flowering, has many optimistic as they work through taking the last of the honey from their hives and into extraction.

Some buyers, including Arataki Honey owner Russell Berry, predict the improved honey take, compared to the previous season, will only add to the backlog of non-manuka honey though.

"It costs money to store honey if you can't sell it and there is plenty of people around with three-quarters of their honey from last season still. If they have a decent season this year, where

do they put it? They can't afford to build a new shed. It's a curly problem," Berry says.

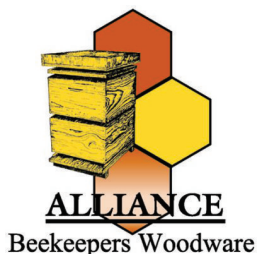
Berry, who sits on the executive committee of industry body New Zealand Beekeeping Incorporated, says he has a good feel for the season. He deals with hundreds of beekeepers as a honey buyer, while Arataki has 20,000 of their own hives around New Zealand. Berry believes the total honey crop will be "above average" and it is shaping as a good season for manuka honey.

"I would think there is at least double the amount of manuka around as what there normally is, due to getting the right weather at the right time and a good flowering. It is a bit of a bi-annual flowerer and it has been a good year, overall, for it."

Fellow major North Island operations, Comvita and Manuka Health, are also reporting higher than average production, although Manuka Health general manager of apiculture Dave



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Campbell says a "normal" honey production season is hard to define.

"In this game 'average' or 'normal' is a bit misleading because you can get some real oscillation around the mean, but the mean – or rolling five-year average – will have lifted this season.

"We have seen a strong flowering in most species right through, from kamahi to rewarewa and into manuka and kanuka flow. There has been a pretty good bloom-set and some conducive weather lately with it getting dry in a lot of regions. The bees have been able to get out," Campbell says.

Like at Arataki and Manuka Health, chief supply chain officer at Comvita Colin Baskin says favourable flowerings and weather conditions in most areas are combining for positive results.

"All primary industries are exposed to the vagaries of the weather, but none more than beekeeping," Baskin says.

"It has been very favourable summer conditions. We have had a long dry spell and good settled weather. Some areas seem to have done really well, with big volume. Overall, it has been better than average."

Comvita has a focus on manuka honey and early indications are it will generally grade well, Baskin says.

"It looks like good volume across the board. Some of the earlier honey would have been skewed to a higher grade."

At Manuka Health the early tests have thrown up few surprises.

"Too early to say conclusively, but we are seeing the usual spread of manuka grades and some consistency year-on-year with our various blocks," Campbell says.

Despite some variable spring weather in Northland and then the government declaring a drought in the region on February 11, both Comvita and Manuka Health are happy with honey yields from the far north. Dry conditions have had an affect though, Berry says.

"The very poor areas are the drier areas. Waikato could be as low as 5kg a hive. That is also caused by overstocking, without that they might have had 30kg," the Arataki owner says.

In the South Island, Taylor Pass Honey Company has hives in Marlborough, Central Otago and Westland. Field operations manager Rex Butt is pleased with the season, considering they had some early-season concerns.

"It was a challenging start and we didn't get ideal weather through the December manuka flow, but we are happy with how it washed up in the end. As the test results are coming out we are happy with where we are sitting in terms of manuka versus everything else," Butt says.

"We have had an above average season – that is a fair way to describe it. If we had had more heat before Christmas, it may have been well-above."

Taylor Pass Honey Company avoided flooding damage in the south and is enjoying some strong late-season clover and borragge flows, Butt says, adding some words which summarise many of the larger producers and buyers' reports.

"Not amazing, but a good, sound sort of a season." 🐝

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Two years of research and development has come to fruition for Hill Laboratories recently, with improvement to their 3-in-1 honey testing method providing improved HMF results.

With the change, honey producers can have more confidence that their honey is correctly represented.

Testing for multiple compounds in one procedure can have its limitations, but work from Hill Laboratories into hydroxymethylfurfural (HMF) testing has made "significant" improvements.

"It is an important improvement," says Bernadette Rodrigues, key account manager for honey, based at the Hamilton facility.

"It has changed the way we measure and report HMF levels in honey, and has brought us more into line with the sorts of methods used by most laboratories overseas."

In New Zealand and Australia, the tests for methylglyoxal (MGO), dihydroxyacetone (DHA) and HMF are carried out simultaneously using a '3-in-1' method because each is a key compound within Manuka honey. Testing for all three at once reduces cost, but the reagent used is non-specific and so can lead to interferences.

Hill Laboratories say their new technique has seen a minimal change in MGO and DHA results, but HMF is up to 35 percent lower when the result is less than 10 milligrams per kilogram and, around the Codex Maximum Residue Limit of 40mg/kg, HMF is around 15 percent lower, though the differences can vary substantially for different types of honey, Rodrigues says.


HMF is an indicator of heat and storage and thus is a general indicator of honey quality.

"Honey producers and sellers can now have more confidence that the results being generated here in NZ will be closely aligned with those being generated by laboratories overseas, so there shouldn't be any rude surprises," Rodrigues says.

This work has been spearheaded by one of Hill Laboratories' Senior Technologists, Dr Bruce Morris, who has been exploring and optimising the performance of the 3-in-1 method for nearly two years.

"Bruce is one of our most capable analysts and has spent a lot of time on this challenge over the last two years, and has been supported by others in the business, so it's something we're all proud of," Rodrigues says.

"Applied science is about improving and making things better. There is always room for improvement and that is what we try to do. Our focus is always on our customers, so they can get the best value for money from our services."

Hills Labs have been using the new 3-in-1 method since November 2019 and the key account manager for honey says feedback from clients has been favourable. 

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Weather Anomalies: February



These maps provide readers an insight into climate conditions for the calendar month just been, as compared against the long term average. Between them they provide an indication of the level of soil moisture entering the current month, and the conditions that were faced in the previous month. From left to right, the maps are:

- **Soil Moisture Anomaly**, captured on the last day of the month and expressed in millimetres above or below the long term average soil conditions for that date.
- **Rainfall Anomaly**, percentage of rainfall capture for the calendar month just been as compared to the long term average.
- **Sunshine Anomaly**, percentage of bright sunshine hours recorded for the calendar month just been, as compared to the long term average.
- **Temperature Anomaly**, degrees Celsius that the mean daily temperature differed, above or below, from the long term average.

Data provided by and more detail available at www.niwa.co.nz/climate/daily-climate-maps



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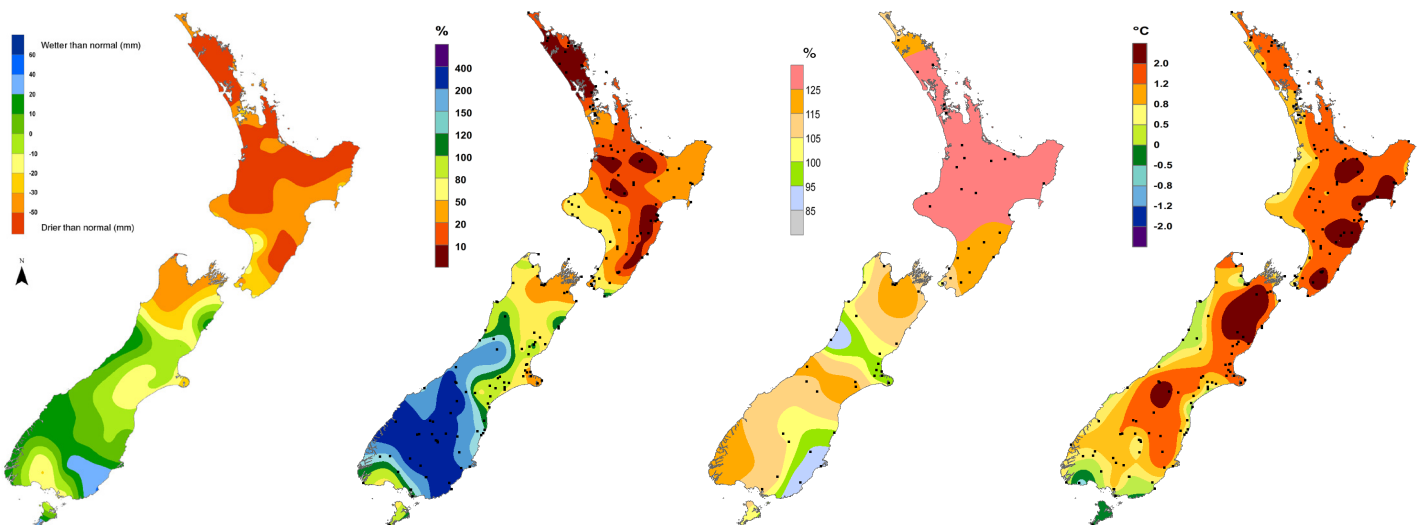
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Soil moisture anomaly (mm) at
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Rainfall anomaly, 9am
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Bright sunshine anomaly,
01/02/2020 to 28/02/2020

Mean temperature anomaly,
9am 01/02/2020 to 9am
29/02/2020

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Booking deadline is the second to last Friday of the month prior to publication and artwork must be supplied by the final Friday of the month.

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