



GROWING MUSHROOMS DURING A GLOBAL PANDEMIC

Words by Heather Woods



The technical life of a mushroom and how it's surviving a marketplace shift.

Even though they look like a plant, mushrooms are just like people. They eat food and respire carbon dioxide. And like people, they can be fussy. They need special, climate-controlled conditions to grow well and when things go wrong, like a global pandemic, it can be disastrous.

On the outskirts of Christchurch, grower George Gibb of Greendale Farm is one of only two commercial mushroom growers in the South Island. And he's got his work cut out for him every day of the week. Covid-19 added a layer of complexity unknown to the horticulture industry. It impacted the established growing cycles in place, had the potential to wreak havoc on the working conditions, and lives, of the skilled team managing the crops, and turned a largely stable marketplace into a shaky, unpredictable void.

From shelf to shelf

Greendale Farm produces white button mushrooms, or Champignons, from their purpose-built growing shed. With seven growing rooms stacked five shelves high, every week the team makes a new batch of compost - and it must be done just right. It will replace a freshly picked crop which, over the last seven weeks, became the mushrooms that are probably on your supermarket shelf today. Add a layer of peat, add mushroom spawn and, well, the cycle goes on.

One of the tricky things about mushrooms is that the very people who work so closely with them can contribute to their demise. People breathe extra carbon dioxide

Above: There's no such thing as down time for Greendale Farm Owner, George Gibb

into the growing room, and they add extra heat through body temperature, so a delicate balance of time spent growing versus time spent picking is needed to create a perfect crop of mushrooms. Otherwise, George says, you risk a long, heartbreaking wait watching a problem move through each crop without having the ability to fix it. You simply need to start a new compost, start a new crop cycle, and wait until it's ready."

The impact of Covid-19

Before lockdown even officially started, a team member (on a work visa) was overseas. It was a stressful experience with flight changes, health risks, and so on, but if she'd missed the deadline, she couldn't have come back - because she wasn't citizen. She'd built a life here and couldn't just go home. The visa issue has been demoralising for staff in similar positions - not knowing if their next visa will be approved. They're good people, paying taxes, doing the right thing, and suddenly everything they've built was up in the air.

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At the end of the day, there's still a demand for those tasty mushies, so they'll keep growing and picking.



Under normal picking circumstances, there's eight people working in a room. But after a site visit by MPI (Ministry for Primary Industries) and implementing physical distancing rules, the most George was allowed was four people. That meant if a full team was working, they had to pick two rooms at the same time. In the mushroom world, that's a big no-no, due to the increased risk of transferring disease between crops - it puts mushroom hygiene at risk. So while the safety and hygiene of workers took priority, keen eyes were also watching for signs of disease. If mushrooms are established, they can outcompete most things. But mould for example, will grow easily and take root; some mould produces enzymes that kill mushrooms.

The shifting marketplace

As a food producer, George was allowed to operate at 100% capacity during lockdown - and stopping would have been disastrous. Stoppages require precision planning and even then, it's not worth all the lost overheads. But Covid-19 didn't exactly stop and ask politely. There was a reassuring focus from the government to the public that there would be no food shortages - no one was going to starve. The supermarkets ordered up big

to satisfy their flocking consumers and were suddenly left with extra stock as people stopped going to supermarket when lockdown started. Mushrooms have a very short shelf life; they're perishable. So for the first week of lockdown George and the team picked them, then threw them away. By week two and three, supermarkets picked up, and some fruit and vegetable shops had exemptions to operate, so stock slowly started moving again. But because cafés and restaurants were still shut down, there was no one else in the market. George was hearing people saying, "I can't get this, I can't get that." And he was saying, "I can't sell it."

The road to recovery

Now, as they navigate Level 1 lockdown, most days are relatively normal, but others can be challenging. Without tourism, cafés aren't as busy, and restaurants, which usually buy higher value and fancier product, have lost their core market. George says, "Secondary product can be sold in bulk and at a discount to restaurants because it doesn't need to be picture perfect if it's being chopped up for a stir fry. And people underestimate how much tourists eat. They're carefree with their money, and most eat out when abroad." Kiwis have to eat too, so the market won't disappear completely.

George's mushrooms are a domestic product. Because of the short shelf life, exporting requires a wide-bodied aircraft running regular, direct routes. And with the aviation industry in turmoil, it's simply not a viable option. But he sees horticulture as providing a stable base for the country. He can't see people losing jobs - especially in his team - and for the moment the mushrooms are producing okay. And despite selling almost all they produce, the market is still incredibly fragile with prices going up and down. But at the end of the day, there's still a demand for those tasty mushies, so they'll keep growing and picking. ●

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