

Fodder growing company innovates with Feed as a Service (FaaS) model

By Editor **Walt Cooley**

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building to house fodder-sprouting equipment is more expensive these days than anytime during the last decade.

HydroGreen isn't giving up though. They continue to innovate. And they have one of the most innovative minds in the cattle equipment industry now at the helm. John de Jonge is the company's current CEO and president of HydroGreen. He built a global dairy equipment business with Artex before selling it to VES. Now he's leading the charge to continue the company's quest to break-through into large-scale applications with its technology.

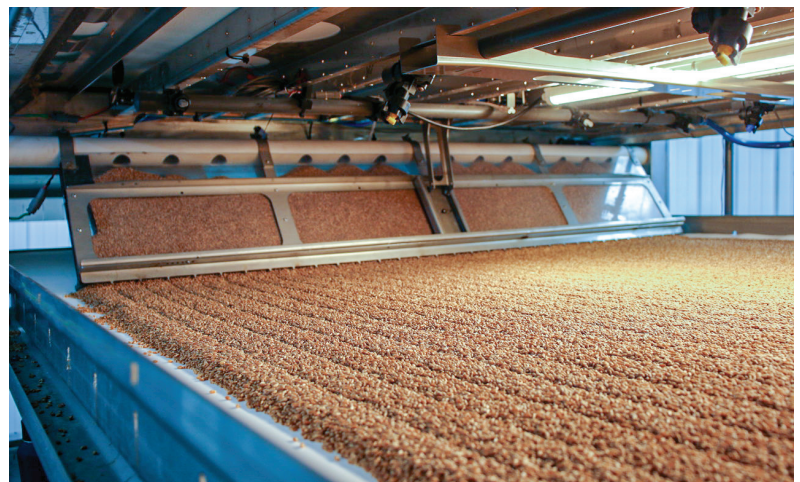
"We're turning over rocks every single day trying to be relevant to the marketplace," de Jonge says. In January the company added one of the top ruminant nutritionists in the industry to its staff to help guide the process. John Jarchow has had a career in feeding cattle and working alongside producers as a nutritionist. His role will be to ensure customers' nutritionists are properly informed and supported while feeding fodder in their rations.

de Jonge knows the market will ultimately judge if the company can deliver enough value to be of interest to cattle producers. Its latest innovation – selling fodder on a contract basis under a FaaS business model – came from listening to clients who were interested in fodder but didn't want a loan to go along with it.

"Dairies and cattle feeders already have a planned budget daily for feed. Our product replaces the product they would already be buying anyway. It doesn't require a huge capital expenditure. They don't have to talk to their banker to finance it. They don't have to talk to their lawyer to build a building. They don't have to wait for construction. Buying fodder is a decision they can make now that will make an immediate input. We've lowered the barrier to entry with this model," de Jonge says about the business and operational challenges facing dairy and beef producers.

The company has identified cattle-dense pockets where it can build a building, own the fodder-growing equipment and sell just the feed to contracted cattle owners. The company has announced several deals with California dairies to provide sprouted-grain on such an agreement. The first fodder-growing center will be in Riverdale, California, at Wilson Dairy. It will be capable of growing 68 tons of feed per day.

"This is how we satisfy the need in the United States," says HydroGreen



HydroGreen unveiled their latest automations last summer while the U.S. Holstein Association was holding its annual convention in Sioux Fall, South Dakota. The company's research hub is located just outside the city.

CFO Michael Kyne. "They want to buy the feed. That isn't the challenge. Making it accessible and affordable enough is where we are innovating."

The contracts are structured with a fee per dry matter produced included. Kyne says the cost per dry matter ton is "slightly more" than the feed it might replace, but the benefits of the feed the fodder will replace are "exponential." Those benefits include sugar inclusion and live enzymes to name just two.

de Jonge says the company has sold out an additional feed center with daily fodder production like the one planned for Riverdale. The location for that one has yet to be announced. The company is exploring sales contracts for a third feed center.

"This is a potential solution for certain regions," de Jonge says. "I say this with all due respect, 'It's not going to be for everybody.' But this model has the potential to make a significant impact in certain regions."

The company is focused on regions where drought, ground water depletion or aridification are common. The company's system requires a fraction of the water that traditional field-grown crops require while delivering a harvest 365 days a year. These

regions are often also prime solar energy generation zones. To capitalize on this, the company is planning to engineer its feed center buildings with solar panels on the roof. This will decrease their energy use and lower the center's carbon footprint.

Overseas the company is finding new business with that same sustainability angle. Government grants can help pay for feed grown closer to the source where it is fed or with less water and less energy consumed. HydroGreen recently announced a feed center with six of its automated fodder machines will be built in Italy next to Cirio Agricola S.r.l, a forward-thinking dairy farm with other automated technologies, which is one of Italy's top milk producers. That facility will use government grants to help pay for the cost of the building. The company is in discussions with other dairies in Europe and the Middle East to build similar installations.

"We've come up with a new model, a new business plan, added new people and coming to the industry with a new approach," de Jonge says. "Metaphorically, we are at the plate with a bat in our hand with a pitcher that we think we can hit."

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Sprouting grain to feed as fodder has been a topic of interest for more than a decade. The concept was Progressive Dairy's #1 most-read article online in 2013. [<https://www.agproud.com/articles/23488-two-dairymen-are-making-profits-with-sprout-fodder-systems>] After 10 years, nutritionists have learned more about the nutritional profile of the feed, and cows vote with their stomachs and consume it voraciously when it's included in a ration.

Yet there are few large-scale applications of the technology, despite serious investment attempts. Today, most uses are still labor-intensive and operated on a small scale.

One company aims to capitalize on fresh momentum and break-through on a commercial scale.

HydroGreen Inc – owned by vertical farming company CubicFarm Systems Corp. – is launching a new Feed as a Service (FaaS) model in the U.S. and finding renewed traction globally using sustainability-focused government grants to fund installations.

The goal posts for fodder seem to always be moving.

At first, its challenge was the manual labor required to "plant" the crop and harvest it every seven days. Shelving could only be as tall a human could reach. HydroGreen and other vertical farming innovators have addressed that challenge and fully automated the planting, watering, harvesting of fodder. HydroGreen even automates ration-prepping of its fodder. Their finished product is perhaps the most ration-ready fodder ever produced. It's not just a dripping slab of sprouted greens and thick roots that gets cubed into chunks, but rather piles of fresh-cut, grass-like strands that are capable of being well-mixed into a TMR.

Cows, good luck sorting out this fodder.

In the last few years, the market for grain has moved the goal posts on fodder again.

Momentum hiccupped as the price of grain became volatile due to war in Ukraine. What was once a price-stable commodity has since turned into more of a roller coaster.

The recent rise in interest rates is making long-term investments more expensive for cattle operations, moving the goal posts for fodder again. The plain truth is that constructing a