



# FODDER FOR THOUGHT

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In January, Organic Alberta, SaskOrganics and Manitoba Organic Alliance partnered to put on an Organic and Regenerative Livestock Conference. During the session titled 'Feeding in Times of Shortage', Kevin Beach and Donna Bryck-Beach spoke on how, after four dry years and decreased yields, they decided to adopt a Fodder System to help feed their livestock. Kevin and Donna Farm in Ernfold, Saskatchewan. They have a mixed farm of cereal, oilseed, pulses and beef. They have been certified organic since 1989 with the goal of growing nutritious food while maintaining healthy soil.

The cracked ground and dry vegetation that comes with drought led to limited grazing and a general shortage of feed for the Beach's. They were inspired by a friend who had some success with a fodder system and decided that despite the supply shortages due to COVID-19, the investment to build a home for the fodder system on their farm would pay off.

They bought a garage and had it wired, and installed plumbing and a drainage system. They used spray foam insulation knowing that the space would have high humidity. The fodder is grown in trays that sit on metal racks. The racks slope gradually so that water trickles from a tubing system set up at the back, toward the front where it can drain out into buckets. The watering tubes are set up on a dual zone sprinkler system, to water in two sections to ensure that their well-pump is not over taxed. There is a water reservoir in the building and a pressure tank with a check valve installed. The trays are watered every 6 hours, for 5-minute intervals. This amounts to about 40 ounces of water per tray, every six hours. It is important to avoid over-watering, especially at the seeding stage as mold

is the greatest enemy in a system like this. The Beach's explained that they use hydrogen peroxide and vinegar to disinfect, and took care to remind participants to check with their organic certifier before using any substances that might affect certification.

To prepare the seed, Kevin and Donna use barley, which they soak in wheelbarrows for 4-12 hours. The longer you soak the grain, the quicker it will germinate. They also add one ounce of hydrogen peroxide to the mixture to kill any pathogens. Barley is the recommended grain because of its high protein content. Once the seed has soaked for a sufficient amount of time, they drain it for another six hours. The grain shouldn't be too wet or mushy when transferring it to the trays, as again, it is important to prevent mold growth. Once the grain is transferred to the trays, they level it out for more consistent germination. The building is kept at 15 degrees Celsius and the humidity around 60%. The humidity will go up when growth starts, therefore, proper air circulation is very important.

When harvesting, the fodder comes out of the trays tightly woven together, like sod. Kevin and Donna load it directly onto the tractor to bring to the cattle, and recommended cutting it up into smaller pieces if required. Each strip weighs about 30 pounds, coming from approximately six pounds of seed in the trays, yielding about five times. They estimate their cattle get about two to three pounds per day, in addition to their other feed. This fodder system is highly digestible by cattle, though it should only be used as a supplement to the roughage the cattle need. Since Kevin and Donna are new to this system, they are not sure if they are saving money, but in a year where they had a shortage of feed this was a great solution to supplement their feed crops. Some Fodder for Thought!