

## Adding value and sustainability to farming Farmer incorporates soybean meal and acidified milk in veal operation

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In agriculture, having a sustainable farm means making the operation more economically viable, becoming efficient and finding new ways to save pennies. That's why a Woodville farmer has incorporated a soybean press into his dairy and veal operation.

Getting the idea from a 2009 FarmSmart conference in Guelph, Bruce McKeown of Caledon Jerseys purchased a soybean press to produce his own protein meal for his dairy cows and veal calves. Integrated just over a year ago, the machine uses pressure to extract oil from the soybean, producing a high-protein meal which can be fed to livestock as an alternative to purchased feed supplements. Gradually and over time, McKeown incorporated the soybean meal into his cows' diet, eventually eliminating the need for purchased protein for his dairy cows and replacing three quarters of the protein he purchased for his veal calves.



McKeown raised his Jersey and Holstein veal calves in coveralls

"It's been better than we expected," says McKeown. "We've been able to eliminate more of the purchased protein than we thought and the animals are performing better. With the cows we have slightly increased milk production and with the veal calves we have a better finish."

At one time, McKeown's soybeans would travel to an elevator, then to a crushing facility where the oil was removed with the remaining soybean meal being transported to a feed before finally making it back to his farm.

"That's a lot of middle-man processing and a lot of trucking," says McKeown. "But with new technology, I was able to purchase a smaller on-farm style crusher to produce my own soybean meal."

Running a registered Jersey herd of 40 and working 700 acres (550 owned, 150 rented), McKeown began raising his Jersey veal calves when he started milking 23 years ago - something that is not common in the veal industry. McKeown says that it takes about two months longer to finish a Jersey veal calf than a Holstein and the end product earns 10-15 cents per pound less than a Holstein.

"When I started, a Holstein calf was expensive, while a Jersey calf cost nothing," says McKeown. "So the net result was the same." Since then, things have changed and McKeown's veal operation has grown to 300 calves marketed each year through the Ontario Stockyards in Cookstown. He still finishes his own

Jersey veal calves, but also purchases Jersey and Holsteins calves from neighbouring farms, making the split about 1/3 Jersey, 2/3 Holstein.



Bruce and Sonya McKeown and family, Caledon Jersey's, Woodville, Ontario

When he had a smaller number of calves, McKeown used to house them in the barn, but as he made changes and increased his numbers, the calves were moved to hutches and are now raised in two coverall barns, one as a starter barn where they are fed milk and the second is located on another farm where they receive a corn-fed diet. Another change McKeown made this past year is the addition of an acidified milk feeding system for his veal calves. Married with five children, there were lots of hands to make light work at one time. Now his kids, aged 17-23 years, are getting busier and with four away at university or college - three working on future careers in agriculture - McKeown looked for new ways to save time.

"The acidified milk feeding system has greatly reduced our labour," says McKeown. "It takes only about 10 minutes a day to feed 40 calves."

Installed in April, the feeding system continuously pumps the milk from a 400 litre tank through pipelines around the barn to nipples placed in pens, allowing free choice for his veal calves. The milk, which has formic acid added to it, reduces the milk pH which increases shelf life. This system allows calves to consume smaller meals more frequently which is similar to the schedule they would have if left to nurse their dams. Though working very well, McKeown says it will take a while before he knows how the system will operate year round.

"We're not sure how this is going to work in the winter," says McKeown. "The system hasn't been used in the winter and if the line freezes we will have to shut it down for a couple of months. It's a learning process but we're happy with it."

Things have been going well for McKeown production wise, there are still bumps in the road, mainly with the veal market and prices.

"The volatility of the market is always frustrating. You kind of have to forget about it and go by the average price."

McKeown said that in August he shipped what he felt was his best load of veal calves, but suffered disappointment with a mediocre sales price of 75-85 cents per pound. Two weeks later, what he felt was a lower quality load of veal calves earned him 15-20 cents more per pound. Says McKeown: "How do you figure this out?"

As for the future, McKeown hopes this up-down of the market will be better controlled by a risk-management plan from the government. He'd also like to see the weight limit on veal calves increased, saying he believes the market is out there for heavier calves.