Copulsation solves dairyman's problem with chronic mastitis

By Gus Howe

The installation of Copulsation units in their milking parlor seems to have solved the chloroform mastitis problem on the Davignon Farm in Evansville, Vt. Francis and June Davignon, along with their son, Karl, started experiencing a chronic chloroform mastitis problem in their herd in 1980 when they installed a double-5 milking parlor with five milkers arranged swing style. For the past five years they have tried many things to solve the problem, including replacing stalls, fixing the barn roof, changing bedding, trying new inflations, docking tails, rebuilding milkers and pulsators. Nothing seemed to alleviate the problem completely.

“This spring I got desperate and spent $5,800 for five pulsators and two control boxes to install a Copulsation milking system purchased from Lennie and Bill Gehm in Lisle, N.Y.,” said Karl. “We saw an improvement immediately. Since replacing the probes in the receiver pump we haven’t seen a single case of mastitis due to the milkers.”

The Copulsation units put out 45 pulses per minute, milking all four teats at the same time, and resting all four at the same time. The herd “likes it better,” said Karl, because their teats were able to heal, and there have been no major problems.

“The vacuum and air phases never overlap,” said Karl. “This system combines milk and rest phases that maximize milk performance.”

Dan Scranton from the Vermont Department of Agriculture came and checked out the Copulsation milking system. A graph recording shows that the vacuum level on Copulsation is 12.5 inches, and 12.7 inches on Westfalia; pulse is 42.6 per minute, with 60.5 pulses per minute on Westfalia; Copulsation has 0.3 percent limping, while Westfalia has 0.9 percent limping.

“According to the graphs there is no difference between the two systems other than the pulse per minute and side-side versus all four at the same time,” said Karl.

“Before we installed these units we had a cow’s udder blow up every day for two weeks and pounds per cow had been dropping steadily for two years. The problem we had before is under control now. We were losing so much money we were going out of business. We expect to save $30,000 between vet bills, loss of cows and milk, with this $5,800 investment.”

Dairy Herd Improvement Association records show that average June milk production, at 54.1 pounds per day on 68 cows (with 50 percent of the herd at the end of their lactation), had increased over average May milk production, which was 52 pounds per day on 73 cows.

Due to five milkers for the 10-cow capacity parlor and only a two-inch pipeline, Karl milks three milkers on one side and two on the other so as not to exceed pipeline milk capacity.

The Davignons farm 522 acres, 220 of which is owned, growing 250 acres of grass for haylage and 3,500 bales of hay. The cows are fed a mix of 9 percent protein corn pellet and 18 percent protein grain pellet in computer feeders. They plan to be milking 75 cows by fall.

“We were having an emergency during milking every time we turned around – not anymore,” said Karl.

“We’re very happy with this system. Right now our plans are simply to wait and see if things continue improving.”