

Wisconsin still world class in artificial insemination

John F. Oncken — 9/18/2008 12:26 pm
Courtesy of The Capital Times

"Record agricultural export growth in Wisconsin for 2008." That was the headline on a recent news release from Gov. Jim Doyle's office. It told of how Wisconsin's agricultural exports increased by 13 percent during the first six months of 2008 to reach \$975 million, and how consumers around the world view our state as a source of food and livestock. The major export products include butter, cheese and whey, with cheese leading the way to the tune of \$49 million, a 48 percent increase during the first six months.

Another fast growing Wisconsin export product listed is dairy genetics.

Dairy genetics? What in the world does that mean, a non-dairy farmer might ask? Is it cows being sent overseas? Or maybe calves? Or bulls?

No genetics doesn't mean cows, calves or bulls getting on a ship and sailing away or jetting to a new home. It means frozen semen from bulls that results in the birth of calves that eventually become cows. It means little plastic straws containing .25 to .5 cc of bull semen that find their way from four locations in Wisconsin to the far corners of the world.

Although you must look long and hard to find a bull on most Wisconsin dairy farms these days (bulls aren't pets -- they're dangerous), you'll find thousands of bulls at Accelerated Genetics co-op in Westby, Genex Cooperative in Shawano, Alta Genetics in Watertown and ABS Global in DeForest.

Of those Wisconsin-based artificial insemination companies, ABS Global is by far the biggest in terms of bull numbers and sales of semen. While the company is well known to travelers on Interstate 39-90-94 west of Madison for its sign with ever-changing short slogans: "We deliver the male" and "We play cupid for cows" as examples, it is a worldwide, high tech company.

Some History

ABS Global dates to 1941 and one J. Rockefeller Prentice, a true visionary who had been raised on Mount Hope Farm, an early research farm in Williamstown, Mass., (now home of Williams College) where he was exposed to livestock improvement through genetics.

Prentice believed in progeny-tested bulls based on comparing cows with their parents in terms of milk and physical characteristics. His original A.I. company was based in downtown Chicago with bulls in Madison, Indiana, California and several other locations.

From the 1950s until about 10 years ago, the ABS (American Breeders Service) facility was located on the east side of Madison. In 1965, a new set of barns and an office building were built adjacent to the then-new interstate and the company headquarters left Chicago for DeForest.

In the early days of artificial insemination (A.I.) there were hundreds of companies (mostly cooperatives) across the U.S. By the 1970s, mergers and the advent of frozen semen left the industry centered in a half dozen companies with ABS the biggest.

Using live bull semen was accepted by dairy farmers, and the industry spread across the country although at a somewhat limited pace because the semen was perishable and had to be used within hours of delivery.

In 1951, a calf was born in England from frozen semen. In 1953, "Frosty," the first calf ever born in North America from frozen semen (produced by ABS), arrived on the scene and the direction of animal (and human) genetics was forever changed.

ABS with the Linde Company developed an insulated liquid nitrogen tank that would hold semen in a frozen state for a longer term and by 1958, the new liquid nitrogen refrigerator became standard equipment in the cattle breeding world as ABS had made the technology available to everyone.

ABS was sold to W.R. Grace in 1967 and in 1968, Bob Walton, an Oklahoma farm boy and dairy science professor at the University of Kentucky, became President of ABS and led the company to worldwide leadership in cattle genetics, marketing and international sales.

Walton, who now raises Simmenthal cattle on his farm in DeForest, retired in 1989. He remembers that ABS began seriously exporting semen to South America, Central America and Cuba in the early 1960s and soon after began working with some European countries.

Key to the growing export business in the early 1970s were ABS employees Earl Kermeier, a LeRoy, Wis., farm boy who spoke German (now retired in Fond du Lac), and Jean-Louis Schrago, a Swiss cattleman, who had received a masters degree at UW-Madison. They were influential in establishing ABS' early export sales in Europe.

In the 1970s several cooperatives entered the export market through World-Wide Sires, a Visalia, Calif., marketing group.

Today, ABS Global (now owned by Genus PLC based in England) has nearly \$100 million in sales to the export market, just under 50 percent of their total sales. Of that, about half of the sales are to the European Union, with Central and South America as big buyers followed by Japan, Australia, Taiwan and China.

Currently there are 1,050 bulls housed at the ABS Global barns in DeForest and at a new facility near Poynette. In addition, there are 260 bulls housed in a Canadian facility. Only a small number of the bulls are actually producing semen. The rest are awaiting the results of their progeny tests that will tell their genetic merit and determine if they will enter the production lineup. Last fiscal year, ABS Global sold 10.5 million units of semen worldwide.

Dr. Charles Brown is the ABS Global head veterinarian and is assisted by Dr. Lynn Schultz. They are in charge of the health of the bulls at the Wisconsin locations. This includes nutrition, comfort and herd health including regular physical exams and blood testing and a rigid disease control program.

The semen is processed into .25 and .5 cc straws for different markets and stored in huge, refrigerated liquid nitrogen tanks before shipping via UPS or FedEx to customers. Interestingly, Dr. Brown says semen from the earliest days of frozen semen in the early 1950s is still stored at DeForest or at a USDA storage facility in Colorado and is still viable more than 50 years after it was collected.

ABS Global has a six-member research group doing basic research on semen processing and storage. Historically, ABS as a private company did much of the early research now used by the industry. The farmer-owned cooperatives often did not have the finances for major research efforts.

The dairy world likes U.S. dairy and beef genetics. And even though the quality of dairy cattle has improved across the U.S. over the past 40 years, dairy and beef farmers worldwide want the genetics that come from those bulls living in Wisconsin and the cows nationwide who prove their value through progeny testing programs.

Why? Because other countries, China among them, want meat and milk to feed their people and Wisconsin artificial insemination companies know how to produce it through top genetics.

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