

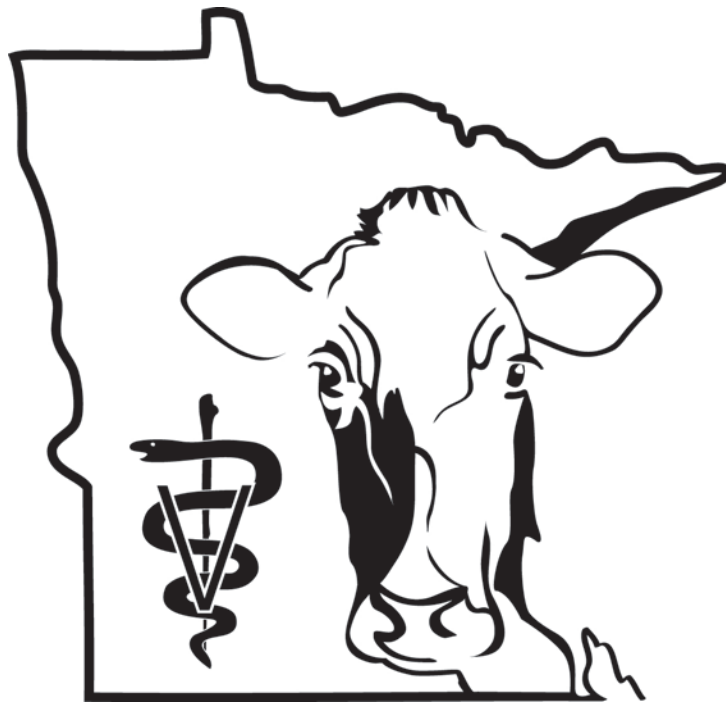
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UNIVERSITY OF MINNESOTA

College of Veterinary Medicine

VETERINARY CONTINUING EDUCATION



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Consulting South of the Border

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Why would a busy practitioner from a non-dairy state like Kentucky traipse off to Mexico to consult with large dairy owners? Adventure, vacation, fondness for the dairy industry or just eager to see if advice given to medium sized dairies in the U.S. would work for 500 to 1500 cow herds in a different part of the world. A little bit of all of these reasons.

History

I met Dr. Fernando Alvarez at the 1994 American Association of Bovine Practitioners Pittsburgh meeting through a mutual friend Dr. Edwin Robertson from Tennessee. Dr. Robertson had been traveling to Mexico to assist Dr. Alvarez with embryo transfer in his clients herds. Dr. Alvarez graduated from the Veterinary School at the Autonomus University of Mexico City. After graduation Dr. Alvarez spent time with Dr. Eric Studer at Carnation Farms and in the practice of Dr. Bob Darlington both in the state of Washington. When he returned to Mexico he established a veterinary practice in the central Mexico state of Queretaro in the city of Santiago de Queretaro. The practice was almost all devoted to reproductive work in dairy cows and embryo transfer in both beef and dairy cows. As a service to his clients Dr. Alvarez also started importing U.S. and Canadian Holstein heifers into Mexico. As his practice grew Dr. Alvarez recognized his clients wanted more than reproductive exams and pregnancy checks. They were requesting advice on nutrition, cow comfort, heat stress, replacement rearing, milk quality, diagnostics and other aspects of dairy cow health and production.

As a dairy practitioner with 24 years of experience and a dairy farm owner for 10 years I had the kind of resume that Dr. Alvarez was looking for in a consultant for his practice. I was concerned that my lack of Spanish skills would be a problem but Dr. Alvarez who speaks fluent English assured me that there would be no problem.

My first visit was to three herds of 500 to 1200 cows. Success was immediate when ration changes in one of the herds resulted in a 3.2 liter (7 lb) per day milk increase simply by adding straw to the ration. Visits were scheduled every 4-5 months with detailed herd reports and ration formulations made prior to each departure. All work is billed hourly with the farms paying all travel expense and Dr. Alvarez furnishing transportation. Dr. Alvarez receives 33% of the service fee and I keep 67%. Money exchange is no problem and payment is either in transferred funds to my U.S. bank, a check on a U. S. bank or my preferred route \$\$\$CASH\$\$\$ in U.S. dollars.

What have I found?

Mexican dairymen with whom I work are mostly good businessmen with dairy farms and other enterprises mainly vegetable production, trucking and import-export business. Farms have been in the same family for many generations and management ability differs from farm to farm. Just like dairymen in the U.S., Mexican dairymen would like to find that silver bullet that will cure all their ills and management problems. They also are susceptible to falling for foo-foo powder feed additives that will *"solve all their problems"*.

On many farms the families of loyal workers have been on the same farm for generations. Wages however are still extremely low averaging about \$70.00 per 6 day week for a milker or about 10% of what a worker can make in the U.S. Workers are paid in cash on Friday and owners are encouraged to pay a portion of wages into a social security type health program for the working class. Mexican

dairymen say they are losing all their good workers to the U.S. My reply is that if you would pay them more they would stay in Mexico and their reply is usually "we can't afford to" even though their milk price through the Alpura Co-op is \$22.00 CWT/ U.S.

Mexican Veterinarians

The Mexican veterinary training varies from a couple of schools with near U.S. abilities to schools with little more than veterinary technician training. I have found that those Mexican veterinarians that earned a Masters or PhD degree in the U.S., after their Mexican education, are quite well versed in veterinary knowledge. Diagnostic ability is the weakest part of the Mexican veterinary education. Mexican veterinary graduates who choose large animal practice usually start as resident veterinarians on private farms and earn about \$250 per week. As in the U.S. many of them are women. The Mexican veterinarians are quite well trained in reproductive work and spend most of their time doing those procedures. Veterinarians who work on multiple farms furnish only their coveralls, the farms furnish the drugs, medications, sleeves, surgical equipment and anything else that is needed. Some veterinarians work on a retainer basis. A typical 1200 cow dairy may have 1 or 2 well trained consulting veterinarians that spend a half or whole day per week on the farm plus 2 to 4 Mexican trained veterinarians that care for calves, carry out the farm breeding program, examine fresh cows do DA surgeries and foot work.

The Alpura milk Co-op has about 20 veterinarian trained "advisors" that work with 8-10 farms each in the area of milk quality, records and nutrition. These advisors have regular education through the Co-op and the Co-op leaders frequently attend U.S. dairy meetings like AABP and NMC.

Drugs and diagnostics

Pharmaceutical products are abundant in Mexico with some having non substantiated effects. There are excellent microbiology and feed laboratories in Mexico with repeatable results. I established a microbiology laboratory at the local feed Co-op because they already had a quality group of people in their feed laboratory. This lab has done an excellent job especially with Mycoplasma diagnosis. Other diagnostic laboratories may have what appears accurate testing capabilities but lack repeatability of results from the same sample submitted in duplicate. Most farm pharmacies have all the needed drugs on hand.

Facilities, weather and production

Facilities in Mexico are state of the art. All the farms with which I work have built new parlors or renovated facilities within the last 5 years. Most of them have grown in size. Parlor sizes range from 2X7 automated side open stall to a 48-cow rotary. Rolling herd averages range from 21,000 to 26,000 lbs per cow yearly either 2X or 3X milking. Most dairymen shoot for 35 liters daily (77 lbs) with my current high herd at 78 lbs daily for 1450 cows on 2X (3 pens 3X). Annual rainfall is about 15 inches with most of it coming during the rainy season of July through September. The 6000 foot elevation makes humidity low, nights cool and days not extremely warm, almost perfect cow weather.

Nutrition and crops

Primary forage crops are alfalfa (11 cuttings), ryegrass and corn (maize). All grains are purchased at a cost of about 50% above the U.S. price and feed cost make up about 75% of the cost of production. Forage storage is a problem on some farms with new choppers capable of harvesting crops faster than they can be packed in the silo. Most bunkers have a silo face that is too wide. There are few custom operators so dairymen do all their own farming. All crops are irrigated, mostly by flood irrigation from deep wells. The water table is dropping and this is a concern of many dairymen. Land is laser leveled for flooding and the ridges made for the ditches result in harvesting windrowed crops that are high in ash due to dirt from the ridges being picked up by the windrow head.

A new midnight inspection of the facilities has revealed limited feed intake at night due to empty feed bunks along with some problems with parlor management. Midnight inspections are now a part of our standard protocol.

Manure disposal

All farms use flush systems with solid separators. Solids are composted for a month or so, then spread over a concrete pad to dry and stored under roof or plastic when dry. Attempts to use the compost prior to drying has resulted in increased cases of watery mastitis. This compost is added to freestalls on a 2X-3X weekly basis and stalls are groomed with a side mounted tractor rake after each bedding addition. Stalls are raked at least 4X per day. Separated water is used to flush alleys or to irrigate crops.

Records and breeding

Dairy records are abundant with daily white board charts in most barn offices, Dairy excel[®] spreadsheets of feed delivery and refusal are posted. Holstein Mexico (the official DHI program) furnishes the official record program for the country. The farms use several dairy software programs including Dairy Comp 305, Dairy Flex and others. All U.S. and most European bull studs sell semen in Mexico with farms having young sire daughters many times sooner than the U.S. Durham, Rudolph and Integrity all have many great daughters in Mexico. Cleanup bulls are used in a few herds and chemical parturition (lactation induction) is quite common. (have you ever seen a Freemartin milk 100 lbs per day?)

Milk price and the government

Mexico has no milk quota system but in the Queretaro area Alpura is a strong Co-op with good marketing skills. They have a limited membership and members have a quota. Over the last few years quota milk has averaged ~\$20 - \$22 U.S. and ~\$14 - \$15 for over quota milk. The Mexican government has just imported large amounts of powder from the U.S. and other sources and Co-op members are now contemplating how to reduce production by 8%.

My work

My work is to evaluate what is being done on the farms and to suggest improvements. The usual routine is to look at the cows and facilities, review the records, look at ration changes, comment on treatment procedures and to assist Fernando with seminars for the farm workers. A detailed report is submitted after each visit either prior to my return to the U.S. or within the first week of my return. Communication by e-mail and FAX is almost daily with Fernando and some of the farms.

Results

I have developed many friendships with Mexican dairymen and veterinarians. The Mexican owners are extremely appreciative and most cordial. I consider Fernando Alvarez and Enrique Rubin two of my closest friends.

Production has increased in most herds with one farm achieving the highest production 3X for Mexico 3 of the last 5 years and 2nd the other 2 years. Problems that still exist include abortions, Brucellosis, tuberculosis, low fertility, lameness and the usual dairy problems.

Fernando has become very confident of his advice to his clients especially over the last 3 years. He was named the AABP Dairy Veterinarian of the year for 2004. In January of 2005 he and I agreed to take over management of a 1450 cow (2 parlor) ranch owned by the Rubin family. The farm had excellent genetics, good facilities, fair forages and abundant workers. The problem on the farm had been that recommendations were not being completed and things just were not getting done. Within a week after Fernando started spending 3.5 days per week on the farm things started to improve. Feed

delivery was increased and freestall management was improved. Parlor procedures were reinforced and labor was given an incentive for doing good work but 15% of the labor force was fired for poor performance. Silage harvesting and storage was addressed and feed quality improved. The owner's faces changed from frowns to smiles when at the end of the first year of management, January 2006, the farm had increased income by \$2.7 million U.S. and milk shipments were up to 172,000 lbs per day or about \$37,840 U. S. per day.

Visitors

I have been fortunate to have many great experiences in my career. The Mexico consulting has been a valuable part of those experiences. I have taken numerous U.S. dairy professionals plus many students with me on the trips south of the border.