



## **Eric Migliazzo**

Growing up and being involved on a small dairy in Central California, I have been witness to many innovations over the years in all aspects of the dairy industry. The earliest memory was riding in the front seat of the old hay truck while my father pushed bale after bale of hay into the feed bunk, every day, up until the purchase of a TMR (total mixed ration) mixer a short while later. This TMR mixer allowed us to maximize feed efficiencies while maintaining better feed inventory management and ensuring every animal's dietary requirements were met and maximized every single day. Small changes such as these are the backbone to ensuring the sustainability of the dairy industry in California.

Every time someone asked me what I wanted to be when I grew up, I always told them I wanted to be a dairyman just like my dad, except for a brief stint in the third grade when I wanted to be a marine biologist. After school was out, I could be found at the dairy helping do anything my young self could handle. Whether that be cleaning calf buckets or holding the flashlight in a dimly lit engine compartment for dad while he changed out a broken part. I could not get enough. Very quickly my schedule filled with activities within California Junior Holstein Association and once in high school, Dairy Cattle Judging and show teams. However, this also exposed me to the hardships faced in the dairy industry. Accusations of pollution, welfare and objectionable practices aimed directly at the dairy industry.

This industry that I grew up in is under attack and it seems nearly impossible to gain ground. Demand for emissions control on dairies often stems from biased studies. Animal activists call for reform while having little to no experience in the industry. Cost of production of feed sources are increasing while wholesale price of milk is at a deficit and per capita consumption of milk is at an all-time low. Meanwhile store shelves are full of beverage products impersonating milk and claiming added health benefits. These battles require the help of everyone involved in this industry.

In recent years, I have been witness to an amazing reform in this industry. Instead of turning a blind eye to the issues, leaders have stepped up and been proactive in addressing areas needing improvement. Almost daily, I see or hear of another dairy in California installing alternative sources of renewable energy such as solar systems or methane digesters. New farming practices being implemented to reduce fuel consumption while maximizing plant nutritional levels and yields. Innovative ways of cow management to increase feed efficiency and cow comfort (resulting in more milk production). While completing my undergraduate degree in Dairy Science at Fresno State, I started working for a small company, Connor Agriscience. Their primary goal is to help dairy and beef operations produce and manage better feeds. From harvesting to storage, Connor Agriscience was on the leading edge of technology to improve quality while reducing waste. Connor Agriscience taught me what a classroom degree could not about the vast need for improvement in on farm practices and how to approach these subjects with industry shaping ideas and techniques. They instilled in me a passion to pursue further learning and education centered around the dairy industry in California and truly make a difference toward sustainability of the dairy industry.

With the implementation of the Sustainable Groundwater Management Act (SGMA) in California, the dairy industry is searching for means of cutting back water usage on farmland used to grow feed. SGMA will affect virtually all the central valley where 3 out of the top 5 dairy producing counties in the country are located. New innovations are being researched to help meet the goal required by SGMA, including use of water saving irrigation practices like drip hose irrigation. There is even research involving running dairy nutrient waste-water through these drip irrigation systems showing promising results. The project I am currently researching for my post baccalaureate degree at Fresno State revolves around the idea of reducing irrigation on corn silage crops (the largest portion of dairy cattle rations) to increase plant digestibility and study response characteristics such as total yield. If successful, we would be able to use less water while producing higher quality feed for the animals that provide us with our most nearly perfect food.

Change does not have to start with a multimillion-dollar complete renovation. Something as easy as cleaning available drinking water troughs for animals every day can go a long way in cow comfort while starting a snowball effect to gradually tackle one change at a time. Sustainability is of utmost importance when evaluating the current situation of the dairy industry. Being good stewards of the land and environment that provides for our livelihood should be the number one target of every dairy producer's list of goals. By minimizing waste, maximizing the use of renewable resources, and striving to do so as humanely as possible; we can ensure the dairy industry in California will thrive for not only my generation, but for many generations after. Because in a world of over 7 billion people, it is going to take a lot more work to make sure everyone has access to the protein, vitamin, and mineral packed dairy products that I am fortunate to consume every single day. My goal is to share access to dairy products with as many people as possible across the world.