

Switzerland – Winter in the Alps

This will be a comparative analysis of traditional Alpine dairy farming in the Swiss Alps and commercial dairy farming in my region of Western Washington. It will also expand upon my previous report that detailed my findings from summer 2017. As a reference point, I will use Krainick Dairy in Enumclaw, Washington to discuss topics such as breeding, feeding, and facilities.

In the previous report, I covered topics of ecotourism and agricultural activities such as harvesting hay and summer crops. It was also during the time that the dairy cows were staying up at summer pasture in preparation for the next season – whereas most US farms operate year-round. My most recent visit was roughly 2 ½ weeks from January 23rd to February 11th. The village where I stayed was in the Müstair valley near the border of Italy.



The dairy that I visited is a part of a cooperative of farmers that owns a cheese factory within the village. This type of farmer owned cooperative is also used in the US. It can be seen with Krainick Dairy and Darigold as well as the cooperative built by farmers in Tillamook. While I was visiting, they were currently working on building a new facility that is more efficient and can process more milk. It will be on the outskirts to allow for more space and is set to be finished this fall.

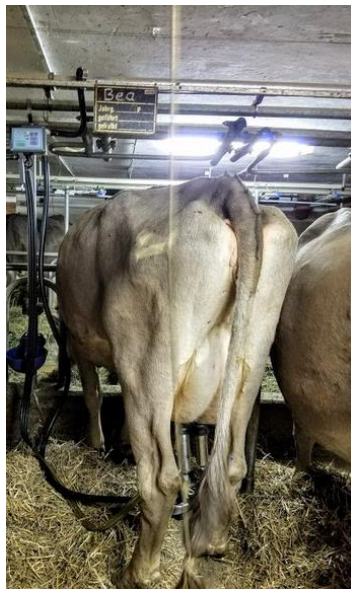
The breed of dairy cow used is the Brown Swiss. Contrary to popular belief, this is a breed that was developed in the United States using genetics from the “Brown” (a Swiss breed). The Brown is still used at some farms, but it is a dual purpose breed and generally does not produce as much milk as its counterparts. In comparison, most US dairies utilize the Holstein, which is widely known for its heavy milk production.



Each animal is required to be outside at least 14 times each month

This farm does implement a selective breeding program and will keep the best producers and ones with good conformation. One third of the herd is bred with Brown Swiss bulls using artificial insemination, and the other two-thirds is bred with Limousin to sell the calves to veal producers (this is specific to the farm). Limousin is specifically chosen for crossbreeding because of fertility compared to other beef breeds as well smaller birth weights (which makes calving easier for the first-fresheners).

Herd sizes in Switzerland are generally much smaller, and so are the facilities. Newer ones do have a barn with a separate milking parlor (similar to the US), but the one I visited used a set-up where they could maximize space with it being centered in the middle of the village. To sum it up, hay was stored above in a loft and below, the cows were each set at a stall lined up in two rows. This is where they will eat, drink, and sleep for most of the season. Although they are kept in this building, it is required to let each animal outside at least 14 times per month.



One pipe is for the air compressor and the other is for pumping the milk into the other room for cooling and filtration

A special system is set up where it will detect when a cow needs to relieve herself (by attaching the tail to a sensor) and there is a bar that pushes them back a couple feet so that it lands in a small depression next to the aisle instead of in their bedding. This helps to keep the area as clean and sanitary as possible because this is also where the cows are milked. There are a series of pipes on the bars above the cows' heads where one is for the air compressor on the milk machine and the other pumps the milk in to the next room where it is almost instantly cooled, filtered, and then pumped into a tank where the local cheese factory can come and drain it.

One of the major differences between this farm and Krainick dairy is diet. The cheese factory produces organic specialty cheeses from grass fed cows that are sold to a major supermarket chain in Switzerland. This means the cows are fed the hay that was harvested over the last summer. Their diets are allowed to have up to 15% of other food sources such as grain. However, silage is not permitted because it promotes butyric acid in the milk and consequently in the cheese. This specific kind of acid produces air in the cheese and can literally cause it to blow up like a balloon – making the cheese unusable. In contrast, the Krainick dairy sells their milk to Darigold. In this case, they have a lot more flexibility in what they can feed their animals.

Although there were so many differences in facilities, technique, and use, there were some major similarities. I noticed the growing average age of farmers. Similar to here in the US, more individuals are choosing other career paths than taking over the family farm. Fortunately, there are protections in place that prevent agricultural land from being rapidly developed in Switzerland – whereas my home town has not been so lucky. It is in part due to the emphasis on preserving nature. The second part is that developing land is usually prohibitively expensive. Also, both of these farms had been passed down for generations (although the one in Switzerland did have a 400 year head-start) and what I saw was a passion for the industry and caring for their animals. This was such an invaluable experience as I was able to immerse myself in a new culture and learn about their agricultural practices.