



McDougall and Sons Wenatchee, Washington John Rawley Summer 2019

Introduction

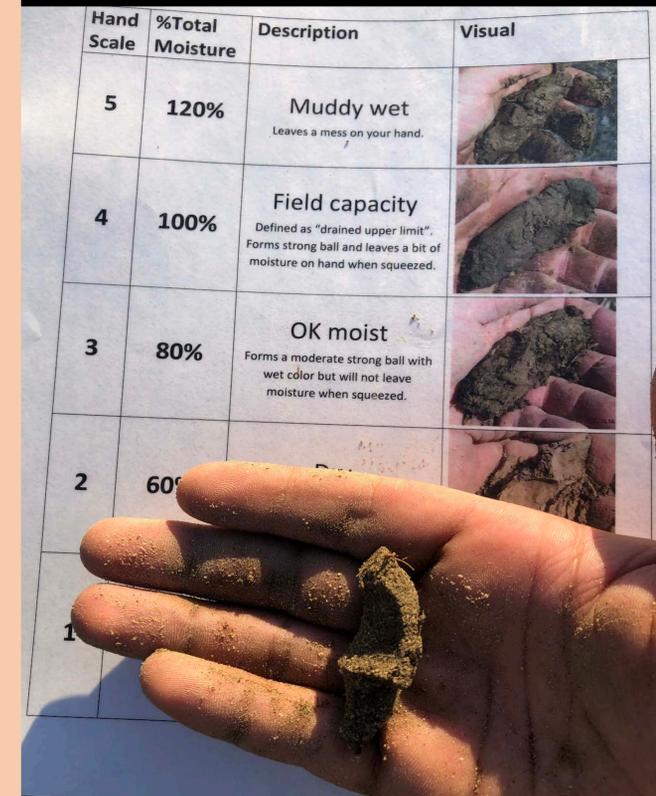
McDougall and Sons is a fruit grower and a packing shed. McDougall and Sons has a focus on bringing the highest quality fruit to the consumer which has made it a very successful company. The company started in the Wenatchee area with only one packing shed, but over time it expanded into 3 packing sheds. It expanded its region on the fruit growing side as well, expanding its southern border all the way to Mattawa, and its northern border all the way to Bridgeport. It has been a family run company for many generations.

Job Description

My main project was tracking fruit growth at several blocks through out the summer, and conducting cluster counts on these blocks. The data was then used to forecast the future growth of the fruit and the amount of fruit McDougall will harvest. I did this on blocks as far south as Mattawa, and as far North as Orondo. Every week, I followed the same route to collect the sizing data. Then as blocks were being thinned, I would stop in and count clusters in the gaps of time in my week. I also collected soil moisture content data that was used to calibrate soil moisture probes.

Summary

Ultimately, this internship is one of the best internships that I could have chosen. As someone that grew up helping farm dryland wheat, I did not know much about orcharding, except what I have learned in school. As McDougall and Sons is a very progressive company that incorporates a lot of technology, I was able to relate McDougall's cutting edge technology with the cutting edge technology that I am learning about in school. At the beginning of the summer, I felt that I really wanted to be a chemical consultant, but as the summer progressed, this internship made me more open to the idea of doing something else in the industry instead.



Above is a picture of me collecting soil water content measurements. I used a spade to peel some dirt away where each sensor is, then felt the dirt to determine its soil water content. I did not have to determine exact numbers, rather a 5% range it appeared to be in. The data I collected was then used to calibrate soil moisture probes.

Below is a picture of what a soil moisture probe looks like going into the ground. After I would find a probe, I would then pick a side around 3 feet away from where the probe goes into the ground, and dig down to where the bottom sensor is. I would then collect data where each sensor is. Often times, this meant digging down three feet and collecting data every four inches in that range. This particular sensor was being hit with a leak from the drip line, which was effecting the probe reading. I had to take note of that, and find an irrigator to fix this problem.

Above is a picture of an apple that I am measuring for the fruit sizing project. This electronic caliper is how I collected all the data for the fruit sizing project. I had to make sure to measure the widest part of the apple, and measure 5 apples from 5 trees, which totaled 25 apples per block.

Below is a picture of the McDougall office that I was based out of. Every day I checked in and out of here, and is where I did my paperwork. This included small paper projects, and setting up the data collection sheets that I used to collect the fruit sizing data. Working out of the office enabled me to meet many people on the daily that work for McDougall. From this, I was able to establish work relationships, and learn from them. This is also the original McDougall packing shed, which started it all.

