Phone conversation with Monique Berube

- 1. All by hand, except for when they were able to afford a tractor
- 2. Never tracked crops produced
- 3. Hay, oats, wheat, barley

Phone conversation with Clarence Berube

- 1. Sold potatoes and made low profit--just enough to get by
- 2. Did not track production/consumption
- 3. Tools included tractor, horse, and hands
- 4. Sold all of produce through market
- 5. Did they feel their profits were hindered by big profits? They did not, as they were in a small town that may have prioritized small farming--events of the 1940s and 1950s

Interview with Rod Olson of Leaf & Lyre

- 1. Healthy Soil + Little farms = Better & eco friendly
 - a. Is it possible to perform plant tissue tests to determine the nutrient density of Calgarian kale vs Californian kale? Where would we perform these tests, and who would fund us?
 - b. Local food is healthier, but people have been conditioned to shop a certain way. How do we combat these habits?
 - c. Regarding food waste: Rod composts any poorly developed/rotten crops, which is recycled back into the soil
 - d. Rod mentioned that we have over time come to the conclusion that all bacteria is bad bacteria. But of course we know that is not true. So he spoke about how industry is incorporating less good bacteria in our produce because it is seen as unclean.
- 2. Competition and loans
 - a. There are agriculture loans in Canada (CALA, BDC), with low interest
 - b. Which will come first, cooperation or competition?
 - c. Small farms have the ability to have UN-funded employees.
 - d. Crop availability and price determine who will buy from you
 - e. Big industries will lower their prices, making small farmers with somewhat higher prices struggle to make a profit.
- 3. Data + Technology
 - a. Database:
 - i. Local growing climate
 - ii. Keep track of growth
 - iii. Keeps it all organized
 - iv. Soil data
 - v. Crop rotation cycle
 - vi. Log and archive

- vii. What do the crops need? How do you grow them? When/where can/should you grow them? (Field guide) (ability to filter, for areas, crops, soil condition etc.)
- b. Small farms often seem to not keep as much track of all the numbers, Rod relies on his own memory and intuition, but wouldn't mind an easy way to keep track of how much is planted and where, and all this info.
- c. Small farms would benefit from 'bigger' tech and data. However, big farm would benefit from better soil, and more sustainable farming.
- d. Will probiotics added to the soil benefit us?
- e. Good and bad bacteria, how much of each is needed, and tolerated.
- f. If small farms had access to funding and resources, they would have the tools they need to do more research (i.e. soil samples)
- g. Personalized and customized, affordable and available.
- h. Is it possible to give new recruits access to the information in Rod's brain so that he can allocate his energy to important decisions instead of training them every spring?

4. Community

- a. YYC Grow
- b. If he got resources that would help him grow, he would want to share those resources with the small farming community
- c. Communal funding
- d. Utilize the info from your fellow farmers (farm-book)

Aftermath

1. How do we ensure the information uploaded by farmers is accurate? Existing citizen science initiatives have templates we can use to ensure farmers can accurately translate their knowledge. In that case, how do we give farmers the time they need to write down and relay their knowledge? They are often in the midst of war, so how will their respective teams carry their burdens while the CEOs add to the communal database?