**Directed Field Studies** 

Online Journal Entries

Submitted for BHO 3999

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Reflective Journal #1: Research Methods Challenging my Inner Math

During December of this year we took Research Methods. I didn't really know what to learned very soon it was about understanding the expect from the course. I mathematical analysis of statistics. I was a little apprehensive at first knowing my math wasn't the greatest. The first few assignments were pretty easy learning about mean, method and mode. It reminded me of stuff I learned back in high school science class and brought back some good old memories. Around the halfway point in the course i found myself treading deep water as the math equations became more complicated. I understood that there was software that could be utilized but I was determined to figure out the equations. On the first test I decided to forgo using the software, knowing that there was a finite time limit. During the duration of the exam I quickly found out that doing long hands on the equations took a while and the clock was ticking down. I focused and pulled it together and in the end I got a B not the best mark in the world,

but I was proud of myself for learning such tricky stuff since it has been so long since I was challenged mathematically. During the second test further in the course I decided to go for it again not using the software to do the math on my own. This was a mistake as I got crushed on the exam, I had reached a point where using the software was needed. Knowing that the end of the course was close and the big research paper was due I was worried when it came to the math part of it. I buckled down and this time left my ego at the door, learned the software and ended up scoring a good grade on my final paper. I got a decent grade and my final mark came up to what I felt was a respectable grade for such a challenging course. I don't know if I will be using statistics in the real world, but I like that I learned this skill and the challenge that it provided me and the opportunity to do something I thought I couldn't do.

### Reflective Journal # 2: The Farmbot Technology vs the Human Touch

During our Technology and Innovation course in February we got introduced to the farmbot a new and innovative technology for small scale farming. The presentation included an online lecture from the inventor of the farmbot and a tour to see the farmbot in person. I was blown away by the technology and how autonomous it was. The actions that could be performed by this robot where seeding, planting, weeding, watering, and pruning. When I reflected on this technology I thought immediately about how this type of technology would change the horticulture industry. How this could affect jobs within the industry and would this take the human element out of the game.

I discussed this technology with my mom who is a 40 year gardner and she reiterated to me that "boy that just takes the fun out of things." At which point do we as

humans stop allowing technology to dictate our lives? The loss of human connection to the products we use is a fundamental flaw in the use of technology and I believe that it creates a major dissociation between the production of products and the end customer.

#### Reflective Journal # 3: Leadership a value added skill

This winter I took a leadership course during the early part of the winter semester. I have education in this from a previous certificate program I took in my youth. It was interesting to revisit this topic later in life and get a retraining in leadership in regards to horticulture. The course was very hands on and allowed me to get to know my fellow classmates in a more professional manner. I felt as though I gained some new leadership skills and found good ways to utilize those skills.

In reflection leadership is a value added skill that takes one's entire life to refine and make an integrated part of their skill set. It is the difference between success and failure, a good job and a great job, and can be passed on to other areas of a person's life. In the future I hope to be a great leader of a crew or team and help to farm out future generations of leaders as I go forward in my career path.

## Reflective Journal # 4: An Education into Genetics; a Passion of Mine

During my technology and innovations course this winter I got to learn about many genetic technologies. These included selective breeding, casper crisp 9, and RNA interference for which I did an entire report and presentation on. The reason I enjoyed learning about these technologies so much was because selective breeding of cannabis is something I'm currently engaged in at a hobbyist level.

RNA interference was an interesting topic to delve into and the main thing I took away from this technology is that as an application to human health, it could be the cure for all disease. Basically if you can map the entire human genome (which was accomplished in 2009) and identify the markers for disease, then theoretically it would be possible to use this technique to silence those genes and stop any disease from taking hold in someone's life. To me this is why technology and research is so important in human societies and where it can lead us in the future.

Another aspect of genetic technology that we learned about is the creation of smaller, easier to use and utilize technology that can read DNA. This technology has been adapted for use by untrained individuals and for use in the field with real time results. Going forward I will continue to read about and possibly purchase this technology for use in my own studies.

# Reflective Journal # 5: Successful Cannabis Breeding This Winter.

This winter I took it upon myself to finish my breeding program that I have been implementing for the last 10 years. I took my successful strain from last summer, a combination of three landrace strains from different parts of the world, and combined it with a new strain composed of a landrace early strain and two of the most high quality strains on the market and combined them together. I harveste over 2000 seeds of this genetic mix which I refer to as my master strain, happily named "The Prince of Persia". I have since then grown out the strain to be tested in the outdoors this summer. From 85 seeds I ended up with 50 germinated plants and from those 50 plants I culled out 25

males. I ended up with 25 female test subjects, I will be planting these outdoors on May 25 at my parents farm legally under a medical grow licence.

The entire ten year process of breeding this outdoor strain has been extremely challenging and now I can see the finish line. I can only hope that my final product does what It was designed to do. Along with testing out this strain for physical response to the environment my next task will be to take lots of verification documentation in the form of video and pictures along with an instructional growing video. This will give me the material items I need to put together a marketing presentation to take to large corporate companies and sell them on the benefits of growing outdoor cannabis.

Along with the visual and environmental aspects of my strain I will have to do my research and put together a cost analysis on what the economics are on growing outdoor cannabis in Alberta compared to growing indoor cannabis. The skills I have acquired at olds college in the last few years will aid me in this process.

Reflective Journal # 6: Having to Make the Hard Decisions To ensure Success

This winter I had to make some hard decisions concerning how I was going to organize the last part of my schooling. Due to issues at home with increased family stress and a unplanned move that put me in a tough financial spot I had to decide if I was going to to attempt my last 3 classes of the semester with the threat of failure and the consequences involved with that or withdraw from those classes and save my GPA to redo them next year. I decided to make the hard choice to withdraw from those

courses and redo them next winter, so as to give myself the best chance of success. This made the stress of moving less and took the financial stress of a further drive to campus non-existent. I kept my GPA where it was at and got a refund on those courses which helped ease my current financial burden.

Now I am feeling much better about my school situation as I finish up my prep course knowing that I can now enter into my directed field studies and find the appropriate job for that directed studies. Going forward I was always using the resources I have to make good decisions and better choices when planning my future under extreme stress. I can now look forward with some positive outlook at the new and interesting learning opportunities I have coming ahead of me.

#### Reflective Journal # 7: Planning out my Summer Garden.

One thing I look forward to every year is planning out my own personal summer garden and with my new house there in a new opportunity to design new growing opportunities. My new backyard is south facing and is full sun exposed. I have a full built vegetable garden that I will be making my own custom designed soil for. I will reflect upon what I learned in my first year soil sciences class to make the best soil structure and texture that will optimize my food production. I've ordered some special heirloom species of tomatoes, peppers, and cucumbers which I now have started and are in the seedling stage. I learned this in olds college that where you buy your seed stock matters and really makes the difference in hardiness and overall yields.

I really enjoy being able to look back at the skills I learned at olds college and not just use them in my professional career but utilize them in my private gardens. I love

making the neighbors jealous and showing them what a difference a good horticultural
education can make.