Outstanding Young Farmers Nomination Form

A. Progress in Agriculture Career (25 points)



1. How and why did you get started farming?

I was not raised on a farm, but was interested in learning more about agriculture, so applied to the University of Guelph. The diversity of the industry and the many directions my career could take attracted my attention. I have a strong interest in working in a production environment, and not so much working in an office behind a desk. My agriculture career has allowed me to use my skills in finance, human resources, and organization. I started working after graduation in the farm equipment industry and then moved to a poultry operation. Abby and I were married during this time, and discussed moving closer to her family farm. After 3 years, we moved to the Sarnia area and I took a position with a large dairy processor which allowed me to get experience in agriculture from a different angle. I worked on one of their farms in a management role and also got experience in new product development, packaging and distribution.

Management roles require a lot of commitment. Once we had our first born, I realized that my career would conflict with my personal family goals. I wanted a career that would allow me to grow individually and continue to have a high level of responsibility. I did not want to take on a lesser role. More importantly, I did not want a career that would take away from my family time. It was at this point, we seriously started looking at forming a partnership with Abby's parents, and move to the farm.

It took 1 year to formalize a four-way partnership between John and Wilma Smith (Abby's parents) and Abby and myself. We used one Chartered Accountant and we each used our own lawyers to finalize the deal. This was the start of our succession plan. We continue to update it every 1-2 years. As of January 1, 2007, the farm is a two-way partnership between Abby and myself.

a) Abby Johnson

I was raised on the farm being the eldest of 3 children. I knew I loved animals and was involved in 4-H for many years. I completed the Bachelor of Science in Agriculture degree.

At this point I still was not thinking about farming but definitely a career in Agriculture involving animals. Daniel and I met at University and both wanted to pursue careers in agriculture. I worked as a research technician at the University for 2 years which was great experience but not a career. I then got a job as a Feed Sales Rep. This was a great learning and personal growing experience.

At the same time, my parents were becoming tired of daily chores and the challenges of managing a farm and asked if we were at all interested in becoming a part of the farm enterprise and share the workload. Concurrently, we had started a family and sending the kids to a babysitter on a daily basis was not what we wanted. The farm seemed to be a good fit for everyone. It allowed my parents to move to town and build a house and step away form the farm while we moved in and took over managing and doing the daily chores. My dad still comes on a daily basis as he wishes and handles the maintenance of equipment and cropping strategies.

We have become a great team with Daniel handling the business side of things and I manage the herd and everything that goes with it. We complement each other well without stepping on each others' toes. And we always involve everyone when we make large decisions. My parents have been great partners to work with allowing us to make important management and growth decisions which have brought us to this point.

2. What were your goals when you started farming and how are they different now?

At first our goals were simple. We wanted to get costs down, keep the farm small, and be able to compensate Abby's parents adequately for their years of hard work. Also, a major goal was to operate a successful family business that has a good mix of work and pleasure. We did not want to get so involved with our farm that we could not spend quality time together as a family.

As we farmed together the first year, production started increasing, and we felt the barn was not being fully

utilized. It made sense to start expanding herd size from 60 to 80 cows. This allowed us to have part-time employees that made it easier for time off with family.

Our current goal is to increase our herd size to 120, continue to drive costs down, and hire full-time help. December 2006 we completed construction on a barn and milking parlour that will allow us to milk 120 cows in the next couple of years. The increased herd size will give us some cost efficiencies. Also, we will be hiring a full-time employee. This will allow us to continue to focus on the business and have regular time to be involved with our three children as they become increasingly involved in activities.

3. What problems have you faced and overcome?

The first problem to overcome was financial. When we became involved with the farm, it had minimal debt. However, it was not extremely profitable. The farm had 37 Kg of quota and no cost control. How was 37Kg of quota going to compensate Abby's parents fairly, make payments on a new farm mortgage, and have enough cash left over to run two households?

4. What types of assistance have you received with the farming operation? i.e.: inheritance

The main type of assistance we have received is reliable maintenance and equipment operation from John Smith (Abby's father). No major financial assistance was given, as John and Wilma received a large amount of money from the farm to build a home and continue to receive monthly payments from the farm business.

5. How do you keep up with educational changes in your industry?

Reading, reading, and more reading. We subscribe to a number of farm and non-farm publications, have high speed internet, and attend regular seminars. Listening to other industry people (both successful and non-successful) has been a good source of education. We also encourage our staff to take courses in dairying to encourage their learning. Being on mailing lists about upcoming training seminars has proven to be effective as well.

Daniel has taught and been a guest speaker various dairying seminars and meetings over the past several years. This forces you to stay current with the industry. Daniel attends OMAFRA nutrient management seminars yearly to stay on top of current legislation.

B. Environmental Stewardship (25 points)

1. Extent of Soil, Water and Energy Conservation Practices

Comment on any/each of the following as they may pertain to your operation. This section should include analysis of the effect of such practices on your farming operation.

Soil improvement

- Reduced manure application on fields have decreased the amount of phosphorous in the soil. In the past manure was applied on available fields to dispose of it, now it is managed and applied only as needed, and excess applied on various neighbours' fields.
- Manure is great for the soil, however, we have to take care in how we apply it. We follow the
 recommendations of a certified crop advisor, and follow our Nutrient Management Plan. Daniel
 stays current with nutrient management regulations.

Erosion Control

(i.e.: wind, soil and water)

Water Management

- Replaced/repaired old tiles that were causing soil compaction and erosion
- Relocated old tiles away from manure storage to prevent water contamination
- Upgraded and sealed old dug well

Reforestation, Woodland Improvement, Wildlife Retention and Land Use

- Planted 10,000 tree seedlings over a 4 year period. This has turned an open rocky part of the farm into nicer green space. We regularly see deer resting under the cover of the small trees.
- Small woodlot on farm is managed on farm. We thin old trees out and use for firewood to heat home.

Energy, Conservation and Management

- We use a plate cooler to pre-chill the milk prior to going in bulk tank.
- We have a second heat exchanger that pre-warms our domestic hot water. Hot gas from the cooling compressors circulates through the heat exchanger. This pre-warms our water prior to going into hot water tank
- Înstalled fluorescent lights and other energy efficient lighting fixtures. Some barn lights are on timers.

Home and Farmstead Improvement

- Removal of old trees and stumps. We have replaced those trees with some maples, pine, and fruit trees
- Updated our flower beds and installed a 30' commercial flagpole
- Several signs are displayed highlighting farm name, environmental farm plan, and OFA involvement.
- New addition put on farm house in 2001
- New equipment shed erected in 2005
- New milkhouse 2006
- New free stall barn and milking parlour constructed end of 2006
- Removal of old buildings
- Two new wells on farm
- New septic system for house

2. What impact does an environmental farm (EFP) plan have on your operation?

It has a profound impact on our farm. Environmental impact is critical when making business decisions. The EFP has caused us to develop more professional solutions for our operation. We have brought in more knowledgeable people into our decision-making process. Overall, the impact has been very positive.

We have taken the EFP training in our area. In fact, we even had one of our part-time employees take the training to get a better understanding of the environment. We have done several EFP projects on our farm that include:

- Septic field and tank upgrade Decommission old dug well
- Bulk fuel storage
- Milkhouse washwater handling
- Tile drainage relocating

C. Production History (25 points)

1. Describe changes in production over the last five years and why it has occurred.

There are many facets that affect milk production. We have improved many of these to become more productive without incurring a larger expense and thus being more profitable. When Daniel and I came into partnership with my parents 6 years ago, I took on a herd management role immediately which my father was glad to pass on. We started grouping cows together based on stage of lactation which allowed us to feed accordingly which immediately improved milk production.

We have worked hard to produce the best quality feed for our cows. Alfalfa is cut at 30% flower which usually gives us 21-22% protein in the feed and optimal ADF and NDF fibre levels. We always cut in late morning to late afternoon to maximize the sugars in the plant which is transferred to energy in the feed. For our haylage we like to have it harvested in 2 days from the time of cutting to maximize the quantity of nutrients retained in the plant. We purchased a hay inverter to speed up the drying process when the weather is adverse. Moisture is also very important and we like the haylage to be between 60-65% ensure optimum fermentation in the tower silos. Corn silage is ensiled at 63-68% moisture which allows adequate starch development in the cob. We grow silage varieties that have minimal lignin content and promotes high DM intake in the cows. When quality is consistent between cuts of hay, high milk production comes easy. In the tie-stall, cows are fed a base total mixed ration twice a day and a computerized grain feeder feeding 8 times a day. Hay and/or balage is fed once a day as a top-dress. Ensuring only high quality feed is stored in the silos has resulted in improved milk production over the years.

The dry cows are given more attention by being fed better quality feed close to the time of calving. They were also vaccinated 2-3 weeks before calving to promote better cow and calf health. Retained placentas were drastically reduced and milk fevers were minimized. Clinical and sub clinical ketosis started being diagnosed and immediately treated before a displaced abomasum (DA) occurred. Now there is very little treatment for ketosis with better management practices. Taking better care of the dry cows has immensely improved milk production into the next lactation by having a smooth transition and cow longevity has resulted which also improves milk production since mature cows will produce more milk over a lactation.

Breeding strategies have changed since we became involved on the farm. My father always used a bull that he purchased from a fellow Ayrshire breeder and all animals were bred to the same bull. We have introduced artificial insemination. We introduced AI slowly by only using young sires for most breedings and the resident bull for cleanup. We had great success with young sires by improving milk production and diversifying our genetic base. We belong to the Vantage program with Eastern Breeders which is a mating program that helps you decide which bulls to use. This program also promotes breeders to classify, register and milk record. Therefore, we are now classifying and just received our first home-bred VG 2 year old cow in 2007. Co-incidentally, she is also our highest BCA cow on the farm with a projected BCA of 330Milk 374Fat 346Protein.

Cow comfort is another issue that is so important to promote high production. We have installed pasture mats, basket fans, modified tunnel ventilation, individual dividers between cows in the tie-stall, cows go outside on pasture in the summer for 12 hours a day and cows are clipped in the fall. All of these aspects have helped to promote the well—being of the cows by allowing maximum lying time and exercise.

We have developed many management strategies that have helped us to improve over the last 5 years. Feed bunk management is maximized by keeping fresh feed in front of the cows at all times. Mangers are cleaned out once a day and the cows are fed twice a day. In the tie-stall, a computerized grain feeder feeds the cows, protein concentrate, rolled corn and roasted beans to the milking herd 8 times a day. This keeps feed fresh and also stimulates feed intake every time the feeder goes around the barn. Udder health management is also very important in maximizing milk production and potential in years to come. Somatic cell count is monitored on a monthly basis which is a tool to determine overall udder health. Clinical mastitis cases are isolated and plated to determine the type of pathogen being dealt with and treated with antibiotics if necessary. Overall udder health can also be an indication of stall cleanliness and/or thorough udder preparation before milking. Our SCC has been very good over the last 5 years(150,000avg.) which proves to our commitment to providing a high quality product and maximizing cow comfort. Reproductive management is critical in maximizing profitability. We try to keep the milking herd averaging 150 Days in Milk(DIM). This is dependent on when cows are bred and the rate of getting them pregnant. We start breeding at 70 – 85 days depending on milk production and body condition score. In the tie-stall during the months the cows are in 100% of the time, a hormone program is used to time breed cows. There is an added cost to this but it far outweighs the cost of an open cow (\$5/cow/day). We have had great success with this

program in achieving our goal of 25% pregnancy rate and averaging 150DIM. Calf and heifer management are an important focus of our enterprise. Calves from the age of 0-8 weeks are fed as much milk as they will drink twice a day. When we started this program 2 ½ years ago, we were amazed at how much milk that they could drink at a young age. Newborn calves drink from 4-6 litres/feeding up to 12-14 litres/feeding at 8 weeks of age. We feed a 22%protein:17%fat milk replacer and the calves grow amazingly well. We also have minimized the health problems that we use to have with baby calves. Diarrhea is not an issue anymore. We still have the pathogens in the barn but the calves are in a healthier and stronger status to be able to fight off the pathogen. We are now weaning calves at an earlier age and calves are bigger than ever. We are also aggressive with our heifers by having a good feeding program in place which allows us to breed our heifers at 13-15 months of age. Therefore, our heifers are calving at an average age of 2 years compared to 5 years ago of 2 years 5 months. This has improved our lifetime production of cows by harvesting milk at an early age with less health problems.

CanWest DHI which is a milk recording and management company that monitors all of these aspects and provides benchmarks and goals to strive for. In 2001, we had a management score of 585/1000 (50th in 104 herds in Ottawa-Carleton) compared to 2006 our score was 816 (6th in 75 herds). We have improved our milk value (total milk, fat and protein in 305 day lactation) over the years and were recognized in 2004 and 2006 to have the highest in Ontario for the Ayrshire breed. We are very proud of our accomplishments and hope to continue to improve in our new free-stall barn.

We have been in our new 5 row free-stall barn for a month now and are very happy with our decisions. We decided to build a 5 row instead of the traditional 4 row or 6 row barn. This optimized our management and financial goals. The traditional 6 row barn is the cheapest barn/stall to build however, the 4 row barn maximizes cow comfort and production. As a team we were able to compromise with a 5 row barn. The high producers are in the 2 row side which allows more space at the feed bunk and less competition (24 cows). The other side has 3 rows of stalls which houses the mid to late lactation cows (41 cows). These cows share the same amount of bunk space as the other side, but, these cows spend less time at the feed bunk, therefore more animals can be housed in this area without compromising milk production. Cows have adjusted well to the new stalls and have increased lying time compared to the tie-stall. The cows are still learning to go to the feed instead of having the feed brought to them. Many high producers have increased in milk production.(+1.8 deviation average for herd compared to last month's DHI test). Cows are not restricted in the amount of feed they consume which is a benefit of a free-stall setting. Lighting and ventilation has improved in the new barn. We have natural ventilation on the sides of the barn as well as the end of the barn to maximize air flow in the summer months. Alley scrapers run 10 times a day to minimize the amount of manure the cows have to walk through. So far, we have minimal clinical cases of feet disorders but, this will be a new challenge for us since walking is critical in a free-stall setting. Heat detection has also improved now that cows are able to exhibit natural oestrus signs. The free-stall barn allows us to milk more cows without increasing our workload which will enable us to be more labour efficient.

2. What new production practices have you tried? i.e.: machinery enhancements, marketing techniques, genetics, etc.

- We have created a website for our farm to help market our products and services
- Designed marketing banners for our farm business and attend fairs and events
- Hay inverter
- Group housing of calves
- Group feeding of calves
- Artificial Insemination

3. How does your operation adjust to changing market realities?

We adjust very quickly to market changes. We have said that our generation will see more changes in the next 5-10 years, than the previous generations have seen in their entire farming careers. Some of the changes we are facing are environmental, more of a global marketplace, and a stronger need for succession and financial advice.

We stay current with environmental changes by taking courses and reading publications. Daniel has taken several nutrient management courses. He is certified to give the applicator technician license training. He receives regular updates by email from OMAFRA.

The global market does effect local production. We feel continuing to expand our farm operation will help us compete in future as global pressure continues to change our marketplace.

Over the past several years we have been using our Chartered Accountant and lawyer for our succession planning. We seek advice from them and have drafted and modified our succession plan over the years. It will continue to change as Abby's parents become less and less involved with the farming operation. We do not use our accountant on a regular basis for financial record keeping or tax preparation. However, we did ask for advice prior to our recent barn expansion.

D. Farm Management & Financial Practices (25 points)

- 1. What farm production and accounting records are kept and how are they used in management analysis? -AND-
- 2. Describe management practises utilized and explain how various factors are weighted in your decision making process.
 - a) Simply Accounting is used for our accounting Records and MS Excel is used to analyze data

Simply accounting is updated regularly. All revenue and costs are entered in the month they occurred. Simply accounting has a budget component that we update at the beginning of the year. At anytime, we can bring up a budget report to see how we are doing. Income statements for each month are exported to MS Excel. We take this information and determine our debt servicing ratio. This allows us to keep a good handle on our cash flow. We like to keep a ratio of 110%, which means for every \$1 of debt we have \$0.10 left over after paying our debt, personal draws, and payments to Abby's parents. If we go below 100% we know to reign in. We do not allow any borrowing unless we can get our ratio up to 125%.

b) Microsoft Excel and Dairy Comp are used for production record

MS Excel is used to make simple lists and charts of animal records. We create lists of cows to be bred, cows and heifers to vaccinate, and cows and heifers due to calve on a monthly basis after each herd health with the veterinarian.

Dairy Comp is utilized through our nutritionist. Many herd management decisions are made with the help of DHI. Cows are given a value based on age, BCA, reproductive status and udder health which a report can be reproduced to rank the cows by cow value to help with breeding and culling decisions. Pregnancy rate can be determined which is the number of animals pregnant during a certain time period as a percent of the number of animals eligible to be bred. This is a very important part of being a profitable operation which many farmers don't realize the cost of having cows open beyond their voluntary waiting period. Dairy comp can also project the number of cows being milked based on calving dates, culling rates and heifer calf percentages. This is useful in forecasting the need to cull or expand based on these values. Many graphs can be made to show trends of specific health problems by DIM or time of year. Information is endless and is all dependent on how valid the information going into the program is. Therefore, great record keeping is crucial to the success of this program.

c) CanWest Dairy Herd Improvement

DHI is done on a monthly basis where a field rep comes once a month and takes milk weights and milk samples from each milking cow. The milk samples are taken to a lab to determine milk fat and protein per cent. Somatic cell count is also analyzed as an indication of udder health. A herd management report is generated to show average milk production for that day, determines average days in milk for the herd, average SCC, fat% and protein%. From this information, a BCA is calculated for milk, fat and protein and milk value in \$. The report also includes individual cow information for breeding and culling strategies. The field rep also inputs all calving dates, breeding dates, health events, and cows sold into the Dairy Comp program. These reports are very useful to make many management decisions that affect the overall profitability of the enterprise. DHI also provides annual reports that are very useful. There is a profitability report that shows the average cost to raise a heifer, when they calve and when they start making you a profit. This shows a clear picture to breed heifers young and don't keep heifers that do not produce well. It also gives you a lifetime profit/cow to help with culling strategies. Herd management score is determined on an annual basis. This includes milk value, udder health, age at first calving, calving interval, longevity and herd efficiency. This helps you decide what aspects of herd management need to be improved in the future to become more profitable. DHI also ranks each producer in the same county and publishes an annual report for all of Ontario.

d) Financial Analysis

We start the year by creating a budget for the upcoming year. We export the income statement from simply accounting and put it into MS Excel. The good items are highlighted in bold, and the poor areas are highlighted in red. Also, the exceptions are taken note of. These are the one-time expenses that may have occurred during the year. Realistic revenues and costs are projected and put into a budget. The budget numbers are based on the previous year and what we feel will be needed in the coming months. We take the entire year and do a

cash flow analysis to see what we will be left over after debt payments, living expenses, and payments for the farm. As each month draws to a close, we export the monthly income statement to MS Excel. A cash flow analysis is done on each month as well. This has helped us determine what months are in need of attention.

Excellent record keeping with regular reviews is very important to us. Simply accounting provides us with the type of record keeping we like. The accounting firm we seek advice from, works with simply accounting software. This allows us to easily email files to get their opinion or assistance. Usually, it is a record keeping issue we send, and they would send back the proper journal entries to do.

3. How do you manage farm safety practices?

We utilize safety videos, literature, and DVD's from the Ontario Farm Safety Association. Staff are not allowed to use equipment or operate our equipment without watching the videos. Some of the videos come with a test to do

WSIB has a Young Worker Awareness program. It comes with an interactive DVD where students can enter a school and go in various classrooms to learn about safety. The big message they get is they have the right to refuse unsafe work without the fear of losing their jobs. We ask our students to bring this video home and go through it. We verbally guiz them a few days later to confirm they actually did review it.

We have a large fenced in sand box that is 30'x30'. There is a play house and play structure with a slide. The location of this area was strategically chosen so you can see the children playing from the barn or in the house.

All equipment is well maintained with all guards in place. If something is found to be unsafe, we do not hesitate to spend the necessary funds to correct the problem.

E. Contribution to Community, Province and Nation (25 points)

Organization	Length of	Position held	Projects	Recognition
- · · · · ·	service		undertaken	received
Public School	4	Volunteer	Reading to	
		_	students	
United Church	>10	Treasurer	Improve	
			bookeeeping	
			(computerized)	
	4	Youth Group	Organize various	
		Leader	activities for area	
			youth, fund	
			raising activities	
Community Nursery School	6	Volunteer and	Community	
		Treasurer	breakfast, fund	
			raising, cleaning	
Soccer	1	Asst. Coach	Organize	
			practices	
Softball	1	Coach	Organize	
			practices	
Ontario Agricultural College	1	Alumni		
		Volunteer		
Canadian Food Grain	2	Organizer	Organized crop	
Banks			donations from	
			area farmers and	
			received pledges	
			from agriculture	
			community	
4-H Ontario	4	Leader		
Dairy Farmers of Ontario	1	Agriculture	Promote and	
		Ambassador	educate farm	
			practices and	
			commodities at	
			events	