

## PETERSON FARMS: A LASTING BUSINESS IS A HEALTHY BUSINESS

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### Abstract

*Peterson Farms has grown from a small dairy farm to a complex grain farm producing grain in the heart of Kentucky bourbon whiskey country. A brief account of the long farming history of the Peterson family is presented. A transition from tobacco farming under intense tillage and cultivation, to grain production using almost exclusively no-till is described. Intensive management of crops has brought on seriously more complex, new challenges. Tobacco is no longer a cash crop, but the current crops of single-season non-GMO soybeans, GMO and non-GMO corn, winter wheat, double-crop non-GMO soybeans, and winter canola present many issues of timeliness and precision. The mega amounts of data generated from 600 fields of these crops requires a whole new level of expertise on the staff at Peterson Farms.*

*The growth from 5,000 acres to 18,000 acres has occurred while maintaining excellent yields; the upward sloping yield trend lines at Peterson Farms during the years of rapid growth show gains equal to or greater than the state of Kentucky as a whole. This does not mean the process of growth has been painless. Consultants were hired to advise on the proper business structure for large family farm, and to advise on a plan for succession to future generations of our family and to allow for future ownership and management by members outside the Peterson family.*

Peterson Farms has grown from a small dairy farm to a complex grain farm producing grain in the heart of Kentucky bourbon whiskey country. A brief account of the long history of the Peterson family and evolution of the current business will be presented along with some examples of its growing pains. Peterson Farms has developed a business structure and a succession plan that we hope will allow the business to build forward to future generations on the shoulders of its present owners.

In January 2015, Peterson Farms was selected the *Farm Journal* “2015 Top Producer of the Year” for the United States by the editors of *Top Producer* magazine. This recognition says that the business known as Peterson Farms is already healthy (good), but the goal of the new business structure and succession plan discussed here and by the next speaker, is to move the Peterson Farms business from “good” to “great”. Our goal is to make the business structure durable enough to last many more generations.

Farming is not new to the Peterson family. Thanks to fifteen years of untiring genealogical research by a member of the Peterson family, it is now known that farming has been carried out by thirteen consecutive generations of direct Peterson family ancestors in the United States. In fact, our immediate ancestors farmed on Manhattan Island in New York State in the 1600’s. The oldest building standing today in New York State is a former residence built around 1650 by Peter Claeson Wyckoff, and Grietje van Ness. The genealogical research done by our family member concludes without doubt that we descended from this marriage and that there have been farmers in every generation since 1650.

Through the years, our Dutch farming ancestors progressed in farming from New York to Pennsylvania to Maryland and finally in Kentucky. The spelling of the last name was changed around 1812 from Pieterzen to the more friendly British format we continue to use today. That is another story beyond the scope of this paper.

Looking back to my grandfather, Mr. John C. Peterson, who was born in 1898, we get a glimpse of the agri-entrepreneurial business that is Peterson Farms. In 1940, the family farm of John C. and Ursula Buckler

Peterson was awarded a \$500 prize by the Louisville Courier-Journal newspaper and named “Progressive Farmer of the Year”. Four of the things mentioned in the 1940 newspaper article announcing the award were family values, working hard as a team, diversity of enterprises, and soil conservation. Although they might not have been written, the core values of Peterson Farms today are probably not very different than in my grandfather’s day. The Peterson Farms core values have been made public, and every employee knows that these are the values they are expected to uphold:

- **Honest, Dedicated, and Hard-Working**
- **Respectful and Compassionate**
- Quest for **Knowledge and Self-Improvement**
- Continuously **Develop our Resources** (People, Land/Soil, Facilities, Water)
- **Passionate** for what we do and **Enjoy Our Work**
- Foster a **Team Environment** that promotes **Achievement and Excellence**
- **Human Safety** must be at the front of our minds every minute of every day

My father, William B. Peterson, is the second son of seven sons of John C. and Ursula Peterson. The modern history of Peterson Farms begins with the marriage of William B Peterson and Rose Mary Osborn. (John C. and Ursula Peterson did not have a farm succession plan and upon their passing, most of their assets were left to religious institutions.) The early years of Bill and Rose Mary’s farm consisted of a 40-cow stanchion barn dairy with tobacco as a cash crop. This was the environment of my early and developmental years.

No-till farming actually originated in Kentucky around 1955, and I remember traveling to the farm of its developer, Mr. Harry Young, in the early 1960’s. Many of the most fertile soils in Kentucky contain a high content of silt and are highly vulnerable to erosion when they are tilled. Mr. Young and the early no-till researchers at the University of Kentucky were true pioneers in saving thousands of tons of soil. No-till was put to use at the Peterson farm in the mid 1960’s with the purchase of the first Allis-Chalmers planter to use a wavy coulter. The no-till method has been used on most of the Peterson Farms crop acreage since that time.

Being the oldest of eight children, I was the first to leave home for University studies in 1965. After obtaining two degrees in Agricultural Engineering and serving in the US Peace Corps in India, my wife Susan and I returned to graduate school at Cornell University in Ithaca, NY. In 1973, we left academia and returned to start a life at the home farm in Loretto, KY. My parents did not call it a succession plan at the time, but their business plan shortly after I returned to the farm consisted of selling the home farm and purchasing with Susan and me a larger farm in 1974. This farm serves as the headquarters of our operation today.

A new dairy partnership was formed and the 250 cow dairy was quite profitable in the mid and late 1970’s. While we were feeding the cows the spent whiskey distillery mash as a source of protein and energy, we started selling some of the wheat and corn to the local producers of bourbon whiskey. A severe drought in 1983 was soon followed by harder times in Kentucky. The economics of the 1980’s negatively affected revenue of many US farms and our operation went through several years of very weak or no earnings. Financial recovery from those difficult years took about seven years for Peterson Farms.

In 1986, I accepted a job at the University of Kentucky to manage the agriculture research facilities as Director of Management and Operations. I continued to be a consultant partner, and spent many vacations and weekends working on the farm. My brother David, who had graduated from college and returned to the farm by then, continued to manage the work at the home farm along with our father. In 1992, our youngest brother, Bernard, joined us at the farm. The last cows were milked in 1989, and grain crop acreage was expanded during the 1990’s. This year we hope to harvest around 23,000 acres, including a 5,500 double-crop acres which of course are harvested two times per year. The current crop mix includes non-GMO corn,

GMO corn, winter-wheat, non-GMO full season soybeans, non GMO double crop soybeans, and winter canola.

Albert Peterson, my oldest son, completed agricultural engineering studies and worked with the John Deere combine development team for several years after college. In 2001, he returned to test out his dream on the family farm. He continued to work as an employee with only a minimal salary and the promise of future equity. The last remaining animals were sold in 1999 allowing all of the farm resources to be dedicated to producing quality grain for our distillery and export customers.

With the introduction of genetically modified (GMO) soybean and corn varieties, a decision was made to continue growing exclusively non-genetically modified (non GMO) crops. This decision was influenced by the fact that our closest distillery customer required 100% non-genetically modified grains and feedstock. With the rapid acceptance of genetically modified crops in the US, premium prices soon became available for the non-genetically modified grain. Greater and greater acres in production continued to challenge available storage capacity at our facility. Major investments were made in steel grain storage units. Corn drying capacity had to be expanded to keep up with modern high-capacity harvesting equipment. Storage has been increased to two million bushels and drying capacity has been increased to 5500 bushels per hour.

In the mid-1990's, measurement of variable grain yields was made possible with yield monitors on harvest equipment. It was soon evident by those early yield maps that soil drainage was influencing yields in greater amounts than we had previously known. While we had installed tile systems on our wetter soils using local drainage contractors, a decision was made to educate ourselves at the Ohio State University drainage school and then to purchase a tile plow. To date, we have installed about 2.5 million feet of drainage tile with our own labor force.

We have also learned that soil chemistry is important to optimizing productivity of the highly variable soil types found in central Kentucky. We have purchased precision fertilizer application equipment allowing us to micro-manage smart soil zones within each field. This procedure has created an exponential increase in management time since it involves thousands of management zones within the 600 fields currently under cultivation. New knowledge has also lead to many other types of prescriptive farming including precision planting, variable populations, just-in-time fertilization, and on and on.

Layer upon layer of data for each of the management zones has created a data explosion with all the various new technologies. This has created a need for employee skill sets we would not have thought we would ever need just a few years ago. We likely have not reached the end of this information explosion and its management challenge. During the 2015 crop year, we will be collecting high resolution data using drone aircraft. We believe this will allow even more intense crop care and management. Data storage and analysis will increase by another quantum amount.

While there has been substantial growth in acres cultivated, the growth in management has not been proportional. There has been non-proportional growth in the areas of GPS data management, subsurface drainage design and installation, surface drainage, GIS-based application technology, fleet management, irrigation and water development, and inventory tracking.

We deliver grains on a "just-in-time" basis. Most of the local distilleries can only store feedstock for one or two days. We are required to deliver our products to them seven days per week. Another "just-in-time" delivery challenge has to do with our non-genetically modified soybeans. The Ohio River terminal in Louisville, KY can only accommodate delivery of our product when they are filling the proper barge. Our ability to meet unique customer needs.

After my retirement from the University of Kentucky in 2010, I returned to the farm as an active partner with a unique world view and expanded vision for our operation. Our son Albert had been patient, but he and we needed to know how he was to be properly compensated and share in the business equity that he was instrumental in creating. After some discernment, we decided to seek expert assistance to develop a sound business structure, a succession plan aimed at enabling the business to continue with interested next generation family members and a management plan for taking our complex business into the future.

Mr. Johnne Syverson of Transition Point Business Advisors will discuss the business organization structure and process that Peterson Farms began in 2012. He will speak to you in the presentation immediately following this one.

We have always practiced a process of continuous improvement in our business. We would especially like to thank some of those who have assisted with our education, training, and coaching:

- University of Kentucky Agricultural Extension Service
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- Russell Consulting
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