



PROFILES IN AGRICULTURAL ENTREPRENEURSHIP

BLUEGRASS BLUEBERRIES EDMONTON, KY

*Matthew Ernst, Extension Associate
November 2002
AEC-EXT 2002-06*

Introduction

Just a few miles out of Edmonton, KY, on US 68 is the Wisdom Community. It is the home of the Kentucky Headhunters, local musical renegades who made it big with their not-so-definable southern rock/country sound a few years back.

On another side of Edmonton, right along the Subtle Road (pronounced Sub-tul by the locals) is another farmstead. It is the home of Larry Martin and Jean Daniels, local agricultural renegades who came to Kentucky from Michigan in March of 1995. They too are hoping to make it big—but instead of southern rock, this husband/wife team is banking on a northern berry.

This case will profile Larry and Jean's farm business, Bluegrass Blueberries. Like other cases in this PROFILES series, the discovery of the business idea and market are addressed first. Attention then shifts to how the business was capitalized and how they addressed regulatory issues. Finally, the case end focuses on growth issues for the business and how the couple plans to tackle future expansion of their own business first, and the Kentucky berry industry in general.

The Idea

Grand Junction is in the middle of Michigan's blueberry country. That is where Larry Martin grew up, doing every aspect of blueberry production at one time or another.

"Blueberries have always been part of my life," he says.

Martin, now almost 50, obtained a college degree in natural resources and went to work for the Michigan

Department of Natural Resources. He then opened up his own business, a pet shop, after working for the DNR for six years.

Even as a small business owner, Martin still managed to have a hand in his first interest: blueberries. In the late 1980s, he bought a 5-acre blueberry farm in the heart of Michigan blueberry country. Shortly thereafter, he met Jean Daniels.

Jean also had prior entrepreneurial experience. She had been a partner in a grocery business in the early 1980s. She liked Larry and she liked the blueberry business, and she soon became his business partner in the blueberry farm. Not too long after that, Larry and Jean were married.

The 5-acre blueberry farm was profitable. Well-managed blueberries can net more than \$10,000 per acre. But Jean had always desired to live further south than Michigan. And Larry didn't mind moving so long as the blueberry business could continue.

To Kentucky

In 1994, Jean inherited funds that could make relocating the business a reality. The couple used weather maps from their local library to evaluate areas in three southern states where weather was suited for blueberry production.

Larry and Jean contacted realtors in each of the three states. Jean went on the road to look at properties in Arkansas and Kentucky while Larry tended to the berries in Michigan. One of the properties was in Metcalfe County, Kentucky, right in the middle of their target area.

Bluegrass Blueberries Snapshot

Location: Edmonton, KY (Metcalfe County)

Owners: Larry Martin and Jean Daniels

Began: 1995

Size: 5 acres for fruit production
60,000-80,000 cuttings in nursery

Employees: 2-4 Seasonal berry pickers

Marketing: Mail order/Internet and on-farm (plants)
Wholesale to retailer (fruit)

Gross Sales Growth: 1997-2001 ~20%
2001-2002 ~50%

Long Term Goals: Income/equity for retirement
Area U-Pick industry
KY Blueberry industry growth

Jean fell in love with a 38-acre property eight miles outside of Edmonton and made an offer on it during her trip. Just months later, in mid-1995, Larry and Jean were loading blueberry plants into U-Haul trucks and bringing them to their new farm in Kentucky.

Southern Benefits and Challenges

The new, warmer climate presented both benefits and challenges for adapting blueberries as a bread-and-butter crop. One initial benefit the couple had was locating in an area of Kentucky where the soil pH was not as high as in other areas. Maintaining a low pH is critical to successful blueberry production, and the average pH on their farm was already well under 6.

To see more of the differences between southern and northern blueberry production, Larry and Jean traveled to Florida and the Carolinas. In addition to the knowledge they picked up on the trip, they also brought back some southern blueberry varieties to add to their blueberry plant nursery.

Larry planned to plant blueberry bushes for fruit production, the primary means by which many blueberry farms generate cash flow. However, he had also started to raise blueberry plants before leaving Michigan. (Blueberries for both home and commercial production are usually planted as two-year old plants.)

Kentucky's climate, warmer than Michigan's blueberry country, made it possible for Larry and Jean to cultivate a greater number of blueberry varieties for sale as plants. Larry also discovered that warmer weather allowed him to propagate plants using hardwood cuttings rather than

softwood cuttings. Hardwood cuttings were easier to work with than softwood cuttings and had a better survival rate in Kentucky.

The Kentucky growing season was longer overall, which bode well for a nursery business. Furthermore, there were virtually no commercial blueberries being grown in Kentucky—and absolutely none near Bluegrass Blueberries—which protected the new farm from blueberry-borne diseases.

The down side of Kentucky for blueberry production was less rainfall during key portions of the blueberry growing and fruiting season. This would make irrigation—for both plants and fruit—essential for extended production. Furthermore, plants were more susceptible to fungi in Kentucky's warmer climate. There were also more insects, some of which Larry was not used to seeing in blueberries.

Overall, however, Larry and Jean loved their new location. They alternated working off the farm to cover living expenses while the berry plants they had brought from Michigan grew.

In addition to propagating their own stock, they also began trying to market some plants to people interested in growing blueberries for themselves. But only a few people in the local area were interested. There appeared to be no potential for generating cash flow until the blueberry bushes they planted began producing fruit two to three years later.

Marketing and Product Development

Jean was working off the farm as a tollbooth operator at the nearby expressway in early 1997. At that time, off-farm employment was the only way that the couple could make ends meet.

“We were poor,” says the couple.

A little after two years on the farm, Jean received notification that her job at the tollbooth would be postponed for a month longer than expected. Larry and Jean realized they had two options at that time: continue to develop their operation while depending on someone else for income, or try to figure out a way to generate income from the existing operation. The limited number of blueberry plants they were selling was not generating any significant income.

“If we made a thousand dollars from the plants in a year at the beginning, I think I'd be surprised,” said Jean.

Plants were all they had to sell from the farm at that time, so what Larry and Jean needed was a bigger blueberry

Blueberry Markets Bursting

Blueberry production and markets have grown rapidly in recent years as research touts health effects of blueberries. According to the North American Blueberry Council, blueberries contain fructose, fiber, and vitamins—all thought to have health benefits.

Blueberries have most recently gained attention because of their antioxidant content. Antioxidants may be linked to preventing or delaying cancer, heart disease, and the aging process.

Blueberry consumption appears to be driving the increased production. As more consumers demand blueberries, farm prices around the country have remained steady to slightly higher. Consumer surveys conducted in Kentucky in 2002 also demonstrated that fresh blueberry markets in Kentucky, especially in larger population centers, continue to show strength.

For more information, visit the North American Blueberry Council at www.blueberry.org and the University of Kentucky at www.uky.edu/Ag/HortBiz

plant market. Demand at local farm and flea markets certainly was not nearly enough to generate significant income. Furthermore, their fruit-bearing plants were growing more slowly than normal because those plants were being used to propagate many additional plants for on their farm.

Finding a market for blueberry *plants* would enable them to generate cash flow until their plants were producing fruit. They found that market in cyberspace.

Going On-Line

“We had a computer,” says Jean, “and we were on the Internet. I just figured that maybe we could use it to sell our plants.”

Jean taught herself how to make Web pages using free Web page services available on-line. The business is still hosted on a free Angelfire site and features the address www.blueberries.biz.

The business’ Web pages are like the blueberry operation—simple and to the point, but very much with customers in mind. The Web site has received good ratings with users and search engines alike.

“We got onto the Web early enough that we got some really top ratings in the search engines,” says Jean.

Searches of the word “Blueberries” on several search engines in October 2002 revealed that Bluegrass Blueberries maintains a significant presence on the Web. The small business consistently ranks in the top 10-15 links for blueberries: Jean credits one search engine for especially boosting business.

“When we got on Yahoo, things really started picking up,” she says.

Search Engine	Bluegrass Blueberries Listing
Yahoo	5
Google	5
Alta Vista	11

Search conducted with “Blueberries,” November 2002

Growth Summary

By 2000, Bluegrass Blueberries was selling many times their first \$1,000 worth of plants. The farm’s gross plant sales increased by 20% in 2000 and 50% in 2001, to \$30,000. A no-frills approach to production has kept production costs low, around 25% of gross sales. Most of their costs come through their labor.

The bushes that Larry and Jean had used to produce their plant stock began producing significant amounts of fruit in

2001. The couple expects their gross sales from the plant nursery and three acres of bearing bushes to be \$45,000 in 2002. Projections for 2003 place plant sales around \$50,000 and fruit sales from five acres at \$30,000.

Larry and Jean say that most of the growth in their business has come as the result of plain hard work “and a little bit of luck.” They used the Internet not only to locate customers, but also to gather lots of information about blueberry production and industry practices. They especially relied on the few sites providing information specific to Kentucky, such as the University of Kentucky College of Agriculture Web pages (www.ca.uky.edu).

Many of their information sources were far outside Metcalfe County. But when it came down to financing their business, Larry and Jean found a local partner to be best.

Capitalization

Like so many entrepreneurs, Larry and Jean had limited access to startup capital. Most of Jean’s inheritance had been used to finance the purchase of their 40-acre farm with a local bank. So they had equity in their real estate, but limited cash left to develop the business.

This was also well before tobacco settlement money was available for investing in alternative crops in Kentucky. In fact, in the seven-year history of their business, the couple has only received one small grant, \$2,000 toward the purchase of a \$13,000 irrigation system.

There was a need to borrow funds for some operating investments—like a tractor. Their first loan was a \$6,000 note for the purchase of a tractor. It came not long after they moved to Metcalfe County.

“When we’ve gone into debt, it’s been an investment debt rather than a spending spree,” says Larry.

The couple’s need to be frugal was reinforced by a strong relationship with their local banker.

“He’s just a really good guy,” says Jean of their banker. “We trust him. There’s been times when he’s told us, ‘You don’t really need to do this right now,’ and so many times he’s given us sound financial advice.”

In turn, the bank was very pleased with how Bluegrass Blueberries has performed. A second operating loan for \$5,000 was extended in 2001 toward the purchase of a lawn tractor and supplies. With only \$11,000 in borrowed capital, the business grew from \$1,000 to \$45,000 in gross sales over five years.

Regulations

Larry and Jean had to obtain the normal local and state business licenses to begin business. They also gained proprietary rights to their Web site name, "blueberries.biz." They trademarked their farm name, "Bluegrass Blueberries." (A simple trademark can often be obtained for a few hundred dollars through the U.S. Patent and Trademark office or through a Web service.) Most recently, Larry and Jean registered the name "Kentucky Blueberry Growers Association, Inc." with the state of Kentucky for use as a Kentucky corporation.

The couple found favorable regulatory conditions in Kentucky compared to Michigan for their business. In fact, they have a complaint uncommon among entrepreneurs: they would like to see more stringent regulation of their business!

"It's not good for the future (of a blueberry industry in Kentucky)," says Jean of what the couple perceives as a lax regulatory process in the state.

"I would like to see them physically inspecting the plants (more frequently)," says Jean.

The couple has only received a handful of requests for copies of their license from customers. Jean expects that licensing will become a larger issue as more people enter into blueberry production in Kentucky.

As the blueberry fruit business has emerged, Larry and Jean have just sold their own fruit. However, they have access to accounts that demand much more fruit than their five acres will be able to produce at full fruit bearing production. Thus, there may be a need to handle other people's fruit. This would require purchasing product liability insurance and open up other regulatory issues that the business has avoided thus far.

Growth Issues

So far, we have looked at how Larry and Jean dealt with their business idea, market development, capitalization, and regulations. We now turn our attention to how the business has handled growth, identifying current decisions they must make.

Production

Bluegrass Blueberries is currently experiencing resource challenges in three production areas: water, labor, and pest control. The business is addressing all these issues with a good degree of success, but they each bear mentioning here.

Water

As the blueberry nursery/plant business has grown, the farm's five acres of bearing blueberries have also come into production. These two aspects of the enterprise have combined to drain a critical resource on the farm: water.

The need for water was especially apparent during a dry 2002 production season. A one-acre, 12-foot spring-fed irrigation pond watered fruit acreage. A one-quarter acre eight-foot catch pond supplemented by the larger pond watered nursery production.

These two ponds were just able to supply adequate water supply in 2002. Increased fruit production will require irrigation expansion. Larry and Jean will expand their two irrigation ponds to meet their increasing irrigation needs.

Labor

Harvest labor is also becoming an issue as fruit production from the five acres of blueberries continues to increase. So far, Larry and Jean have minimized the need for cash labor expense by contracting with local neighbors who exchange labor for blueberry plants.

When the neighbors have acquired all the blueberry plants they want, cash outlays for harvest labor may be necessary. If Larry and Jean do not want to incur this cash expense, they might elect to enter the U-Pick market. They already have a list of 75 interested U-Pick customers.

Pest Control

The blueberry bushes that began bearing fruit in 2001 met a formidable opponent in 2002: the birds. The couple did not want to invest cash into an expensive netting system, so they began searching for alternative bird control methods.

Near the end of the 2002 season, Larry and Jean discovered a newer product called RejeX-it AG-145. The spray product is manufactured by Becker Underwood of Ames, IA, and available from distributors around the country. This product is non-toxic to humans and interferes with the digestive system of birds that eat berries treated with the product. Larry and Jean's successful use of this FDA-approved product should ensure minimal future crop loss from birds.

Kentucky Blueberry Growers Association, Inc.

Bluegrass Blueberries has supplied blueberry plants to several farmers across Kentucky who are adding small blueberry acreage to diversify farm production. Realizing that there may be a need for information sharing and possible group marketing efforts, the couple formed the Kentucky Blueberry Growers Association. Before initiating a statewide membership drive, the couple may wish to clarify the group's function or otherwise define exactly what it is that the group will do.

Marketing

There are also several issues that Larry and Jean are considering with regard to marketing. These include target markets, packaging, and branding.

Target Markets

To date, the market for Bluegrass Blueberries has essentially come to its door or mailbox. The market for the nursery business is clearly defined, but the fruit market seems to be murkier.

The primary fruit customers so far have been small grocery retailers or farm market stands. Larry and Jean have used simple labels that promote their Kentucky-grown blueberries. They have marketed a lot of fruit to the local CB Foods grocery during the past two years, prompting requests from the other CB Foods stores in the region for fresh, hand-picked blueberries. But Bluegrass Blueberries is unable to meet this demand at their current fruit production capacity.

Packaging

In 2002, the couple discovered that they could increase their price-per-pint by varying the size of containers that they used. Replacing some of their 1-pint containers with ½-pint plastic clamshells that were already familiar to blueberry consumers, they realized an increase in their seasonal wholesale price of 10 percent.

One-pint plastic clamshells are widely accepted as the standard blueberry package. However, there may be room in the regional blueberry market for smaller (1/2-pint) and larger (quart) blueberry containers. How to discover these markets and introduce a larger blueberry container to local consumers accustomed to one-pint containers could be a significant barrier to continuing these profits.

Branding

The possibility of marketing by the Blueberry Growers Association presents Larry and Jean with how to market their product. Their trademarked farm name, "Bluegrass Blueberries," might also have the potential to become an effective brand name for Kentucky-grown blueberries. Depending on the couple's intent to expand into additional markets, they may consider efforts to differentiate their farm name product from other blueberries.

Conclusion

Bluegrass Blueberries has grown from a \$1,000 business in its first full year of operation (1997) to a \$45,000 business in 2002. The primary source of income is still the sale of blueberry plants, shipped out to locations all over the United State on Mondays via US Priority Mail.

The sudden growth of the plant business when Bluegrass Blueberries established a Web Site slowed the growth of Larry and Jean's expected primary income source: fruit. Cuttings from blueberry bushes planted for fruit were propagated for sale as plants, slowing down the maturation of the first three fruiting acres. However, cash generated from plant sales allowed expansion of the farm business with minimum borrowed capital.

Larry and Jean anticipate gross sales approaching \$80,000 in 2003 as five acres of plants finally begin full fruiting. The successful growth of their business is a major factor in their retirement plans. Furthermore, they have supplied blueberry plants to about 40 acres of production around Kentucky. They have also freely shared knowledge and know-how with interested producers around the state.

"I don't expect to see Kentucky producers meeting local demand for fresh blueberries in my lifetime," says Larry.

Larry and Jean especially encourage those farm producers in Kentucky who have bought plants from him to target the more profitable U-Pick market. Ultimately, says the couple, what they want to see is a growing blueberry industry develop across the state to help replace lost tobacco incomes.

Given their success and persistence thus far, these "renegade" agricultural entrepreneurs from Metcalfe County seem well suited to lead the way.

Acknowledgements

Special thanks to Larry Martin and Jean Daniels of Bluegrass Blueberries for participating in this project.

Thanks also to the case reviewers: Craig Infanger and Steve Isaacs of the University of Kentucky Department of Agricultural Economics.

This case was prepared under the direction of Dr. Tim Woods as part of the market development and education activities of the New Crop Opportunities Center.

This case study was prepared by Matthew Ernst, Extension Associate, UK Department of Agricultural Economics, 400 CE Barnhart Building, Lexington, KY, 40546-0276. Questions may be directed to mernst@uky.edu.

Funding for this project was provided through the New Crop Opportunities Center at the University of Kentucky.

University of Kentucky
Department of Agricultural Economics
400 Charles E. Barnhart Bldg.
Lexington, KY 40546-0276

Phone: 859-257-5762

Fax: 859-323-1913

<http://www.uky.edu/Ag/AgEcon/>