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Boone Brothers' Farms, LLC[1]

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Boone Brothers' Farms, LLC

Warren and Josh Boone are partners in an Idaho potato farm. The Boone's moved to south-western Idaho after selling their California vegetable farm and partnered with a local grower in 1993. The venture proved very successful. The operation was originally 3,500 acres. Since then the operation has grown to 8,000 acres and the brothers have taken it over completely.

The Boone's operation centers on processed potatoes, but they also produce fresh potatoes and a small acreage of seed potatoes (55/40/5 percent, respectively). Their staff of 16 is considered one of the best in the region and quite efficient for the size of the operation. However, the potato industry is changing (see Exhibit 1) and the Boone brothers are facing some major decisions.

Through his association with an industry group, Josh met a potato grower from the Mid-West. Several of their conversations were about the potato industry there, specifically in North Dakota, the 4th largest potato producing state in the US in 2004. The basic resources seem to be available – land at a reasonable cost, a lack of urban pressure, water for irrigation given permit applications, and good soils. The major selling point is that the area is closer to the markets of the east. In fact, Josh has come to believe that if there was an opportunity in the industry to expand, North Dakota might be the place.

The alternative is to focus on growing the current operation; the Boones know the market and already have a very firm base from which to grow. The problem is that recent consolidation in the region's potato production has increased the competition for land intensely. Warren has said for quite some time that they need to grow considerably if they want to continue to be on the processor's radar screen, but doing that in their current area would be difficult.

Before making significant decisions the partners usually try to reassess their strategic health. They last did this four years ago. Josh believes it is time to revisit their strategic position: the farm is clearly at a crossroads. Should the Boone brothers expand their business by creating a new operation in an area new to them, or should they stay where they are and focus on their

current operation? Ultimately, Warren and Josh know that whichever opportunities they chose, they must take advantage of their strengths and make sound financial decisions for the business.

Farm Background

The Boone brothers were raised on a vegetable operation in California. Warren earned a horticulture degree and Josh an engineering degree from respected universities. Despite their family's roots in California vegetables, Josh and Warren both believed that their move to Idaho was the right choice. The urban pressure surrounding their original farming operation had grown to the point that farming was becoming difficult, and the value of the land for development purposes could no longer be ignored. While their father was not enthusiastic about the move, he had been ready to retire, and the sale of the land provided him with a comfortable retirement. The sale also left the boys enough equity to get a great start in a new area.

The Boone brother's limited liability partnership owns and leases farm ground primarily south-west of the Magic Valley area. The 8,000-acre farming operation was focused on potato, wheat and corn production in rotation, until recently when the brothers began to experiment with hay production as the number of dairies moving into Idaho increased. The farm uses a three year rotation on potato production and currently produces 2,600 acres of potatoes. Corn, wheat, and hay are the primary rotation crops (about 1,500-2,000 acres on average). Warren, as Chief Operating Officer, and the two farm managers have maintained the operation to this point by using custom farm operators on some of the grain and hay production where necessary. The brothers hoped to increase this production, particularly for processing potato contracts, but land is increasingly difficult to obtain.

Over the years, Boone Brothers' has been near the top of the region in potato yields – yields average 5 percent higher than the surrounding county averages. Warren attributes their growth to farming efficiently and competitively while following best management practices. This high productivity results in an operation that Josh believes to be financially sound. An abbreviated set of financial statements for the last year are shown in Exhibit 2.

Warren and Josh share managerial responsibilities for the operation fairly equally. Over the last three years Josh has moved into the role of general manager. "It took a couple years for me to get used to it all and really feel comfortable," Josh said. "It was challenging for me – and I grew up

on a farm. Now I feel confident in the decision making." He has held primary responsibility for marketing the operation and its products and has worked hard to communicate with neighbors, customers, and even competitors. Warren and Josh both believe their relationships in the community are key to their operation's success in terms of favorable land rental arrangements, access to quality seasonal labor, and reasonable custom rates for their grain production.

Josh also developed a good working relationship with J.R. Simplot (a potato processor based in Idaho). Because of this relationship, the Boones had been moving their production out of fresh potatoes and into processing potatoes as quickly as Simplot would allow. Local Simplot management told Josh that over the next few years they would like to reduce the number of producers with which they contract, and they would be interested in contracting 85 percent or more of the Boones' production.

Warren focuses on managing the field operations. "Growing potatoes is an art," Warren said. "You need to have an eye for the plants and an eye for diseases. It's always a challenge to produce good quality product and please your customers. In this competitive market, the more you please your customers, the more your customers will please you." Warren supervises two farm managers that direct the operations on two 4,000 acre farm units. He focuses much of his energy on determining proper crop rotations, developing strong relationships with input suppliers, and negotiating with custom operators. Warren also spends a good bit of time scouting the potatoes.

Each of the farm managers has good late model technology and equipment, a full-time crew as well as seasonal help when needed for planting and harvesting. While Warren is actively involved in the crop rotation and input purchasing decisions, both farm managers are generally left with the responsibility of day-to-day operations and management of farm employees (including job descriptions, salaries, raises, and bonuses).

The office staff consists of Josh and Warren as well as an accountant and an office assistant. Josh is primarily responsible for financial analysis but Warren joins Josh once a month to review the financials and discuss problem areas. In addition, any changes in the farm's strategic direction in terms of products, growth, etc. are jointly determined between the brothers. Both had agreed that no major decisions would be made unless both of them agreed on it.

Their vision statement and goals are the following:

Vision/Mission Statement

Boone Brothers strives to be the relationship company of the potato production industry. We are committed to being a leader in the potato industry of tomorrow. Boone Brothers will be known for quality products, dedicated employees, and integrity in business and community relationships.

Goals

1. Sustained profitable growth in sales through enhanced product value, cost control, and asset growth,
2. Return to investors/owners in line with the 10-year average of the stock market,
3. Maintain strong relationships with neighbors and other farmers in the region, and
4. Be considered a leader in the potato production industry.

Buying into the Expansion

Creating operating units outside of the center of operations is not an untested idea in potatoes. A number of producers have moved to locations like Nebraska with some success in the last 10 years. Making a success of potatoes in the Mid-West would require two things: business sense and a contract. Josh and Warren's background, and their balance sheet, shows they had business sense. Preliminary phone conversations with an expanding range of contacts in North Dakota indicated that getting a contract might be difficult.

Having a contract would provide an intermediate level of price risk protection. Boone Brothers would have some confidence in their market security and income stability as well as access to capital. Considering the heavy investment in the crop that the partnership has at the beginning of the year, having some certainty about revenues is almost essential to obtain financing.

An expanding area of processed potato production is in central North Dakota. The potato industry in North Dakota is briefly described in Exhibit 3. A significant number of growers from further north in the Red River Valley have joint ventured with the newest plant, owned by Cavendish Farms, to add irrigation to land and begin producing potatoes. In response,

neighboring plants expanded capacity. In the seven intervening years the contracting arrangements have started to solidify and today there is not a rapid change in acreage use.

Josh has heard that processing potatoes from the area could be sold to a Simplot fry processing plant on the eastern North Dakota border (Grand Forks). Given that their partnership already contracted with Simplot, Josh wants to explore the idea. Other contractors are a fry processor, Cavendish Farms, in Jamestown and an RDO flaker plant in Grand Forks.

Like many large processors Simplot is trimming its number of contracts and centering its sourcing on a small number of producers. Becoming one of those producers would be difficult. Many growers contract 300 to 400 acres of potatoes. Larger growers in the area produce 3,000 to 3,500 acres. To be seriously considered Josh expects to have to produce about 1,000 acres of potatoes.

Josh's conversations at the Simplot plant in Grand Forks were quite positive. He knew that Simplot was quality conscious and had a strong relationship with retailers. He didn't really expect more than that; processing plants held most of the cards after all. Knowing that a business arrangement with them would be tough but fair was comforting news. Also, having two other potato contractors in the area helped ensure a competitive price.

Fitting into the processor's system would be important, and it would begin by meshing with the company representative in the area. "Working with the processor is a year-round commitment, even when I don't need anything," Josh said. "I want to be in constant contact to head off problems and be the first-in on opportunities." It's possible that Josh's relationship with the local Simplot representative could be leveraged to gain contacts at the North Dakota plant.

While it is unusual for much land to be for sale in the area, a conversation with a Farm Credit Services banker turned up a rare opportunity. The banker mentioned that a large farm would be going out of business very soon. The operation, located in Kidder County, has been well-organized production-wise, but apparently had expanded too rapidly and the owners could not repay their debt.

Josh had explored the operation with the banker and believed that the 4,000 acre operation, ND Potato, Inc., could be considered a serious acquisition target. The Boone Brothers' want to keep the operation intact – including management. Josh and Warren envision taking over the capital assets of the farm and directing the marketing operations while the current operators stay on to manage the actual production. They absolutely do not want to take on any of the operation's debt.

The banker believes that the current owners will consider selling the entire operation. So, Josh set about gathering information on the value of ND Potato.

North Dakota Operations

Josh's banking contact had fairly accurate information on ND Potato, Inc. Therefore, after talking to the banker and canvassing contacts in North Dakota, Josh felt comfortable putting pen to paper and developing some rough estimates of what his bid for the ND Potato operation might look like. The crop rotation has generally consisted of three years alternating potatoes, corn and wheat. Official yields in the area for the last six years had averaged 430 cwt/acre. Josh's banker indicated that ND Potato management had been conscientious about production practices and that potato yields were about 5 percent above county average, making ND Potato yields about 450 cwt/acre for 2003.

Josh expected an irrigated quarter section of land (130 acres irrigable land) to run about $1,350 per acre (including a pivot). Based on this information ND Potato, Inc. probably had $5.28 million worth of land. The machinery is described as either late model or well maintained if it isn't new. The machinery and buildings are estimated at about $1,500,000 – a harvester, a Hanson Rice 250,000 cwt storage facility, a couple of windrowers, a couple tractors, several boxes for trucks plus a number of new shop buildings.

Josh must certainly visit the operation to develop a more complete proposal – but pending an onsite review and interviews his bid is the following:

4,000 acres at $1,350/acre	= $5,400,000
Machinery, buildings, storage	= $1,500,000
Total	= $6,900,000

For revenue estimation Josh assumed the farm would continue producing potatoes, corn (for grain) and wheat. Price estimations projected for 10 years were developed by reputable university observers. The potato contract price he assumed would have a base of about $5.25 with quality incentives worth another 50 cents/cwt. Josh assumed he would be selling half the production at harvest time (with a shrinkage of 10%) and store the rest (shrinkage of 20%). Based on the conversations, the storage premium should be about $1.55/cwt.

Josh estimated that one-third of the acreage would be in each of the crops (about 1,300 acres). For potatoes he estimated fixed costs at about $475.55 per acre and variable costs at $1,370 per acre. Fixed expenses for corn and wheat were $77 and $44.55 per acre respectively, while variable expenses for corn and wheat were $263 and $131 respectively. Gross revenues were $223 and $214 for corn and wheat. These he based on budgets developed by North Dakota State University and his own estimations. He expected expenses to grow at about 2 percent a year. Josh was concerned about the earning or net income of the farming operation, so when he thought into the future he resisted adding land appreciation into his assumptions of profitability.

Josh intended to make a presentation of his findings and get feedback from the rest of the management team at the next monthly management meeting. He knew that Warren was luke-warm to the idea of creating a new farm far from the Idaho base of operations. Nevertheless Josh felt their options were limited: either grow incrementally in their current area, or replicate their operation elsewhere. The meeting is going to be full of discussion Josh thought.

Discussion Questions

1. Is the expansion to North Dakota a good strategic fit for Boone Brothers?

2. If the investment is profitable, are Boone Brothers financially capable of the expansion?
3. Would growth in North Dakota be preferable to growth in Idaho?
4. What additional growth alternatives should Boone Brothers explore?

Exhibit 1. The US Potato Industry

Processors used 257 million hundredweight (cwt) of potatoes from the 2003 crop, of which 59 percent was frozen (mostly as French fries), 21 percent was chipped, 19 percent was dehydrated, and the remainder canned or used to produce potato starch or flour. About 86 percent of the 2003 crop was used for human consumption with the remainder going for seed (6 percent), livestock feed, on-farm use, and/or for diversion programs (less than 1 percent), or was lost due to shrinkage, spoilage, etc. (7 percent)[3].

The most significant long-term trend over the last 30 to 40 years has been the reduction in fresh product sold and the increase in frozen product. Frozen potato product growth had been driven by the fast food industry, both foreign and domestic. By the 1970s domestic processing capacity couldn't keep up with demand, so Canada and Europe began processing. Today, the US still ranks as the largest producer of frozen potato product in the world, producing an estimated 3.8 million metric tons (mmt) in marketing year 2003/2004. Canada ranked second, producing 1.39 mmt, while the Netherlands were third with 1.36 mmt. Despite the global appeal, US frozen potato products are primarily sold in North America, Japan and China.

Domestic demand of potatoes rose from the late 1970s to the mid-1990s, but growth has slowed. Consumer preferences are becoming more sophisticated and more convenience-oriented products are demanded. Additionally, dietary movements toward healthier eating have motivated a search for low-fat alternatives to the ubiquitous side order of french fries at fast food restaurants.

Although the domestic market appears to be maturing, international frozen potato consumption had shown continued growth. Like the North American market, international consumption has centered on the french fry. Much of the growth has come from Pacific Rim countries that are developing a westernized palate and prefer American products as they obtain increased purchasing power. So international growth is available, particularly in markets such as South Korea and Japan. However, foreign competition is from other potato product exporters like the Netherlands and Canada may meet some of this demand.

US processors, or fryers, are limited primarily to three: Simplot, McCain and Lamb Weston (a ConAgra company). Contracts with these firms are limited. The situation is not helped by an overproduction of potatoes. With limited contracts available some farmers grow potatoes for the spot market, which tends to be a volatile price market. Processors are generally shifting to a preference for a small number of large producers.

As big as the processors may be, the retailer is in control – that is to say, the large fast food restaurants. A food service giant will offer a contract to a processor which the processor can either take or leave. If they take it, they end up putting price pressure on the grower, which is essentially the only place that there has been any price flexibility since the processor's highest cost is the potato feedstock.

Processing and production have moved north, with more crop dug in Canada. A few producers from the U.S. have shifted production to western Canada to be near those processors. Other

[3] http://www.nass.usda.gov/nd/septpot.pdf

processing trends include joint ventures of large producers with processors. Smaller and medium sized growers are increasingly unable to produce the amount needed to be considered a preferred provider.

Research results show that grocery stores believe that the potato is moving toward a value-added convenience product with minimal preparation. With time as a limiting factor in food preparation, potato products are viewed as too time consuming, particularly among such categories as DINKS (dual income, no kids). Retailers are increasingly coordinated with shippers. Consolidation among supermarkets has created buying desks responsible for acquiring a large volume of product. In turn processors have also consolidated with packing sheds responsible for marketing the potatoes needed by supermarkets. Many of these processor-supermarket relationships are long-term associations which present entry barriers for new grower-shippers.

Growers usually sell fresh potatoes on consignment, though this practice has changed drastically in the last 10 years. Larger growers have invested together to run their own packing sheds. The prices are based on Federal/State market news services.

Since the early 1970s, the grower/packer share of retail price for fresh potatoes has declined as the retailer's share has risen. During the 1980s, the grower/packer share of retail price averaged 25 percent, down from 29 percent in the 1970s. In the 1990s, the grower/packer share of retail prices averaged 20 percent, while the remaining 80 percent went to retailers. However, in 2002, the grower/packer share of retail price reached its highest share since 1985: 26%[4].

[4] *http://www.ers.usda.gov/Briefing/Potatoes/background.htm#History*

Exhibit 2. Boone Brothers' Financial Statements

Income Statement: Boone Brothers

	2004
Revenue	
All crops	$8,167,438
Expenses	
Operating Expenses	$5,672,183
Depreciation	$ 490,042
Interest	$ 395,868
Total	$6,558,093
Net Income	$1,609,345

Balance Sheet: Boone Brothers
12/31/2004

Assets		Liabilities	
Current assets	$5,500,000	Current liabilities	$2,300,000
Noncurrent assets	$19,249,812	Noncurrent liabilities	$3,355,267
Total farm assets	$24,749,812	Total farm liabilities	$5,655,267
		Owner's equity	$19,094,545

Boone Brothers, LLC Production Information

The 8,000-acre farming operation was focused on potato, wheat and corn production in rotation, until recently when the brothers began to experiment with hay production as the number of dairies moving into Idaho increased. The farm uses a three year rotation on potato production and a third is in potatoes. Corn, wheat, and hay are the primary rotation crops (about 1,500-2,000 acres on average).

Production costs and revenues for potatoes are listed below.

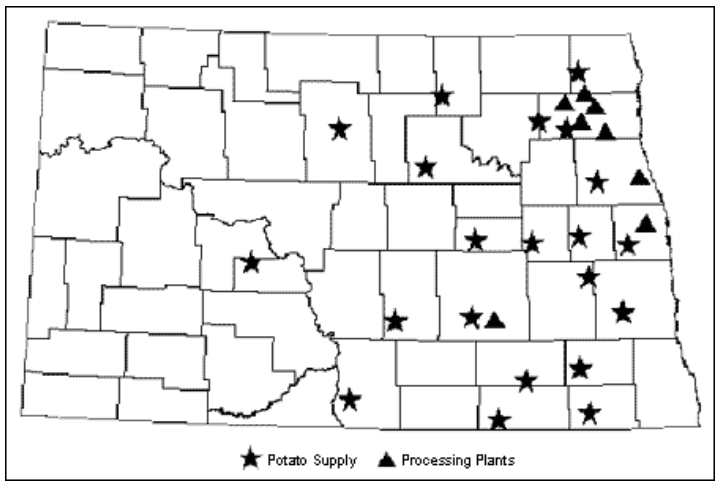
Gross Revenues	Quantity/Acre	Price/Unit	Acres	Total
	385	5.15	2750	5,452,563
Fixed Costs	Cost/Acre			
	640		2750	1,760,000
Variable Costs	Cost/Acre			
	1140		2750	3,135,000

Exhibit 3: Potato Production in North Dakota[5]

North Dakota potato acreage was 117,000 acres in 2003, compared to 118,000 in both 2002 and 2001, according to the North Dakota Agricultural Statistics Service. Russets accounted for 41 percent of the total acreage, down from 44 percent last year. Whites decreased to 39 percent of the total compared to 40 percent in 2002. Reds accounted for 20 percent of the total, up from 16 percent last year.

Historically potato production has focused in the fertile Red River Valley and centered on dryland fresh potatoes. The result of a mammoth glacial lake, the Red River Valley has rich, black soil and was flat and virtually free of stones, with few hills and slopes – making it ideal for consistently producing good potato crops. It could grow a high volume of fresh, chip, process and seed potatoes. Large portions of the potatoes produced in North Dakota are used for processing and are grown under contract.

The marketplace has changed significantly over the last 10 years with expanding production in irrigated processed potatoes and a move toward more production in the center of the state. With the arrival of a large processing plant seven years ago a significant processing industry is now in place. Key areas of supply and demand are presented in the map below.



Potato chips are processed at the source of final demand because chips are bulky and fragile. Potatoes used for chipping and other snacks are transported to urban centers before being processed. Red River Valley potatoes used for chipping usually move toward large eastern markets.

Frozen, dehydrated, and flaked potato products are produced more efficiently closer to the production. North Dakota is home to three potato processing facilities J. R. Simplot, RDO,

[5] Much of the discussion of processors comes from "North Dakota Potato Industry" by Mark Berwick.

Cavendish Farms (formerly Aviko) and Western Polymer Corporation, a starch extraction company.

The J.R. Simplot Company is the largest potato processing facility in North Dakota and is a privately held agribusiness corporation. Simplot's food processing division operates a french fry processing plant at Grand Forks, North Dakota. Potatoes for processing are stored at Simplot's facility in Grand Forks and also at producers' warehouses. Simplot operates year round and the majority of their raw potatoes are grown in North Dakota with most of the production being sold out of state. The byproducts are used as livestock feed in various forms throughout North Dakota.

RDO is a dehydration plant also located in Grand Forks. Because of the extreme competition in the flaking industry raw materials must be purchased at the lowest possible price. RDO attempts to buy excess North Dakota and Minnesota potato supply at reduced prices. RDO will only forward contracts with potato producers in years of anticipated strong demand or low supply. The finished product is sold out of state and the potato by-products are used for cattle feed in North Dakota and Minnesota.

In 1995 Cavendish Farms decided to build a privately owned potato processing plant in Jamestown, North Dakota. The plant in Jamestown processes potatoes into french fries. Most of Cavendish Farms' contracted potato production is grown within a 100 mile radius of Jamestown. Cavendish Farms strives to contract enough potatoes to operate the plant year round. Harvested potatoes are stored both with producers and at the processing plant with the finished product being transported out of state.

Western Polymer Corporation operates a starch extracting plant in Park River, North Dakota. The process uses potato water taken from potato processors in Grand Forks, North Dakota and Perham, Minnesota. The water is transported in tanker trucks to the Park River plant. Starch is extracted from the water and shipped to Moose Lake, Washington by rail car for further processing.

Estimates of production costs are presented in the following tables.

North Dakota Production Estimates

Gross Revenues	Quantity/Acre	Price/unit	Acres	Total
Potato – directly shipped	203	5.75	1,300	1,513,688
Potato - stored	180	6.80	1,300	1,591,200
Corn, grain	115	1.94	1,300	290,030
Wheat	64	3.35	1,300	278,720
Total			3,900	**3,673,638**

Fixed Costs	Cost per Acre	Acres	Total
Potato	475.55	1,300	618,215
Corn	77.00	1,300	100,100
Wheat	44.55	1,300	57,915
Total			**776,230**

Variable Costs	Cost per Acre	Acres	Total
Potato	1370	1,300	1,781,000
Corn	263	1,300	341,770
Wheat	131	1,300	169,832
Total			**2,292,602**

Operating Interest	Cost per Acre	Acres	Total
Potato	25.79	1,300	33,527
Corn	4.78	1,300	3,653
Wheat	2.69	1,300	2,288
Total			**39,468**

Depreciation	Cost per Acre	Acres	Total
Potato	246.28	1,300	214,370
Corn	28.63	1,300	37,180
Wheat	15.35	1,300	19,955
Total			**271,505**

Total Cash Expenses	Cost per Acre	Acres	Total
Potato	1,845.55	1,300	2,399,215
Corn	339.90	1,300	441,870
Wheat	175.19	1,300	227,747
Total			**3,068,832**

Price and Yield Projections

Year	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
POTATOES										
Base Price	5.25	5.60	5.40	5.85	5.57	6.08	5.81	6.29	5.86	6.50
Quality Premium	0.50	0.53	0.51	0.56	0.53	0.58	0.55	0.60	0.56	0.62
Storage Premium	1.55	1.65	1.59	1.73	1.65	1.80	1.71	1.86	1.73	1.92
Yield	450	456	462	468	474	480	486	492	498	504
WHEAT										
Projected Price	3.35	3.21	3.24	3.31	3.36	3.42	3.47	3.51	3.56	3.60
Yield	64	52	54	55	57	55	54	55	55	55
Government total	23,006	29,504	28,111	24,863	22,542	20,686	20,686	20,686	20,686	20,686
CORN										
Projected Price	1.94	2.13	2.19	2.22	2.23	2.26	2.28	2.3	2.32	2.32
Yield	115	118	120	122	121	120	121	121	121	121
Government total	81,585	57,416	49,858	46,078	44,819	41,040	38,520	36,001	33,482	33,482