Deer Creek Farms: Tradition into the Future

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Deer Creek Farms: Tradition into the Future

George is walking through one of his hog barns on this crisp fall morning thinking back over the last 32 years. They had not all gone well, but overall, he had no complaints. Thirty-two years ago this week his father, William, had collapsed while out feeding cattle and left George to figure out where Deer Creek Farms should go in the future. It was a difficult time for the family dealing with an unexpected death and struggling to decide if Deer Creek Farms could survive such an abrupt change in leadership. George had spent his entire life working on the farm and picking up odd jobs from neighboring farms when needed. It was more than just his livelihood; it was a part of him. Both he and Carol, his wife of 35 years, were scared to take on ownership of the farm, but they were even more afraid to let go of their dream of one day operating Deer Creek Farms.

Carol had grown up in Indianapolis and had dreamed of living in the country since a little girl attending the State Fair. She loved looking at the prize winning cattle and hogs every year. Carol and George later met after Carol earned her teaching license and moved to Carroll County to teach second grade. Carol was twelve years younger than George and while the age difference never seemed to bother either of them before, George was beginning to worry about retirement and spending as much time with Carol and their children as possible. William was only five years older than George is now when he died and George would like to transition the farm to his children while he is still capable of helping them make decisions and provide labor. Carol has always joked that George will never retire and if the children intend to come back to the farm George will be living in their basement running the farm from behind the scenes. While this joke has been taken lightheartedly, George knows the children need a chance to learn from their mistakes; after all, he certainly made enough of them.

George and Carol's two children loved growing up on the farm. David could often be seen pulling his Little Red Wagon behind him with tools, parts, feed, anything he thought his dad might need. Emily was usually sitting in the barn talking to her animals and "diagnosing" them as she pretended to be a veterinarian. David has been working in town and helping farm on the weekends since he went to college nine years ago to be an agronomist. His wife Susan is in her first year of practice as a pediatrician and they have a child on the way. David and Susan had indicated last Thanksgiving that when they had kids they wanted to raise them on the farm as David and Emily had been raised. Looking back, George realizes they must have been hinting at their plans, but at the time, both he and Carol thought the statement was simply made in passing. Emily will graduate from college this spring with an animal science degree. She has never let go of her love for animals, but she has decided not to pursue veterinary school, at least for now. Her fiancé, Jacob, will also graduate in May with an agribusiness degree. If George could get the kids to work together, he thinks Deer Creek Farms could continue to be successful. However, the farm would need to support three families and three generations – not an easy task.

As George makes the short walk back to the house for his morning coffee he reflects on the mission of the farm:

> Deer Creek Farms is more than a family farm that provides the highest quality of corn, soybeans and hogs. It is a living entity. The original homestead was settled in 1867 in Deer Creek Township. Since then, the farm has provided for the livelihood of generations of families and farmworkers. We are committed to providing every member of the family a chance to take a meaningful role in the business. In addition, we seek to be a contributing member of the farming

community, and to treat our employees, suppliers, buyers, and others with whom we do business, with integrity and dignity.

The mission statement had been the idea of his local Extension educator and his insurance agent as they worked with George and William to identify the farm history and plan for the farm's 100th birthday celebration. It has always been a source of pride that the family and Deer Creek Farms have been able to survive since its founding and they have seen and adapted to many changes. From its initial start growing corn, wheat, oats and raising livestock, it has diversified and embraced technological innovations. Deer Creek Farms must continue to change and grow, while utilizing the unique talents of each family member to continue this legacy.

George's focus over the last 32 years has been on corn, soybeans, and finishing hogs. He has some ideas for expansion in each of these areas, but he has a feeling the kids will have other ideas. David would prefer to spend more time focusing on the agronomic aspects and eliminate the feeder pig enterprise when the contract expires. Emily on the other hand has always mentioned that she doesn't understand why there are few beef cattle in Indiana and would like to have a cow-calf herd in addition to the hogs. Jacob may end up being the outside opinion that they all need to listen to as they put his agribusiness skills to work helping them identify the best route to move forward.

Deer Creek Farm Today

Currently, George is farming 1,640 acres of corn and soybeans and finishes a minimum of 12,000 feeder pigs annually on contract. In 2011, Deer Creek Farms average corn yield was 168 bushels per acre and average soybean yield was 55 bushels per acre. Due to the drought in 2012, yields were down to 116 bushels per acre for corn and 42 bushels per acre for soybeans. George and Carol own all of the acreage. The first 800 acres were inherited after the passing of

William and include the original homestead where the house and hog facilities are located. George then kept his eye on land sales in the area over the years and picked up additional acres when possible. He purchased 200 acres in 1982, 480 acres in 1990, 120 acres in 1995, and 80 acres in 2003. He has been hesitant to make any purchases recently due to high land values. The rental market in the area has also been competitive enough that they haven't tried to increase acreage through renting.

George's philosophy has always been that there was no need to have the newest equipment in the field. He is capable of doing many of the repairs himself and has strived to maintain the right size machinery for the farm and not buy the newest and biggest equipment just because it is available. The primary equipment on the farm is a 360 PTO horsepower tractor, 320 horsepower combine, 8-row (30" rows) corn head, 36 foot chisel plow, 39 food field cultivator, 36 row conventional planter, 100 foot boom sprayer, and 30 foot grain platform.

The contract hog production was a way for Deer Creek Farms to stay in the hog business without as much market risk. Logistically hog production is ideal because of the proximity to a local processing plant in Delphi, IN. George has always felt a connection to the industry, but he had struggled in the last 15 years to market the hogs at a profit. The current contract provides a guaranteed payment of $162,000 each year per barn as well as the opportunity for bonuses based on performance. George provides the building, labor, and utilities and the contractor provides the pigs, feed, veterinary services and medication, and transportation. George appreciates the consistent income and typically receives bonuses for low death loss and high feed efficiency.

Ideas for the Future

George and Carol are in agreement to share the news of their phased retirement with the children at Christmas and make the official transition once Emily and Jacob graduate in May.

George would like the farm to continue as close to its present state as possible, but understands the need for change and evaluation of where they are going. George had changed the cropping mix and William had eliminated the cow herd, so each generation before had made adjustments and George was prepared for the adjustments the next generation might make. Carol is fine with whatever changes are made as long as everyone supports each other through this process.

David

David is currently working as a crop consultant. He truly loves his job but hates the stress during the summer. It isn't the hard work or the long hours that bother him, after all, he was raised on a farm; it is the stress of not being around to help on the family farm during some of the busiest times. He would like to see Deer Creek Farms expand their acreage and become a seed dealer. David is confident that they could rent more ground to expand their corn and soybean production, and he has already built a strong report with many of the area farmers as a consultant. He knows there are some risks involved with expanding the corn and soybean enterprises, but he would rather stick with what he knows than try to expand into another area. He especially would like to eliminate the feeder hogs. One time his family went to visit an aunt in California; only one time in his 27 years did they go on a family vacation, because of those darn hogs!

Susan

Susan would love to have her and David's children raised on a farm. Her grandparents farmed when she was growing up and she enjoyed spending holidays and occasional weekends there. She has been listening to David's stories about his childhood (and lack of vacations) for the last seven years and thinks it sounds perfect. With a baby on the way, Susan cannot think of

a better time for David to be a part of the farm full time. Susan will continue to work in town and can provide consistent off-farm income as well as labor during the busiest seasons.

Emily

Emily is counting down the days to graduation and the wedding. With her and Jacob's wedding the weekend after graduation and senior classes at college, looking for a job has seemed relatively less important to her. In her mind, now would be a perfect time to take over leadership roles at the farm. She has worked part time in the animal science department as a student worker and would really like to add a cowherd back to Deer Creek Farms. Emily knows the drought conditions the last several years have caused some producers to cull their herds. She thinks they could buy heifers now and be ready when the prices go back up. Emily is afraid the biggest challenge will be getting her brother to listen to and respect the ideas of his younger sister. However, they have always had a strong relationship and David and Jacob are quickly becoming like brothers.

Jacob

Jacob and Emily are planning to get married in the next few months. Jacob has had interviews with Farm Credit Mid-America and several area banks. He would like to be a loan officer. Jacob grew up on a farm, but his dad could never seem to get ahead and they eventually lost the farm when Jacob was in high school. This is part of what shaped Jacob's decision to obtain a degree in Agribusiness. He wanted to be able to help farmers like his dad better understand the decisions they were making. His college advisor encouraged him to get a masters degree and work in Extension, but he is convinced he can help farmers just as much by working as a loan officer and helping them understand the implications of borrowing money along with doing a better job evaluating loan requests. Jacob knows Emily wants to be a part of Deer Creek

Farms as soon as possible. He would like to be a part of the farm as well but recognizes the need to have work experience off the farm and after seeing the struggles of his own family's farm would like to build their finances first.

Decision Making

Carol has decided the best way to keep the peace and have everyone work together on the future of Deer Creek Farms is to schedule a family dinner with a chance for each member to give a 15-minute presentation of where they would like to see Deer Creek Farms go in the future. She is excited to see the kids' presentations and hopes this will be a peaceful time for George as well. She knows he is confident now is the time to transition the farm, but she is a bit worried about his reactions to the children's suggestions (especially if they vote to eliminate the feeder hog enterprise).

Carol's main role in the business has been to provide labor during the summer when school was not in session and to keep the financial records. Sample enterprise budgets for 2012 as well as farm financial ratios are included in the Appendices to illustrate the current position of Deer Creek Farms.

An important step in the decision making process is to identify the potential scenarios that might unfold under all of the proposed plans. Next, it is important to recognize that things may not go as planned. A contingency plan should be developed to identify potential disasters, emergencies and threats as well as the family member/employee in charge, and how to respond to each disaster or threat. One method Carol has suggested the family use is scenario planning to visualize the potential for the expansion plans under uncertainty. The steps of scenario planning are provided in Appendix D. A contingency plan outline is included in Appendix E to be used by Deer Creek Farms. The tools will be useful in helping the family evaluate the risks of each

proposed scenario. One strategy that is often overlooked but important to consider is exiting or downscoping. It is important not to view these decisions as business failure but merely a period of transition or reallocation of resources to another operation. The farm has exited out of enterprises in the past and should not be afraid to do so in the future when an activity no longer meets the business' overall plan.

Key Questions

1. Deer Creek Farm is faced with options to expand current operations or diversify. What questions do the family members need to consider as they make their decisions?
2. How can Deer Creek Farm expand while keeping risk at a manageable level?
3. What are ways the farm may be able to transition ownership or reduce the risks associated with increased or changing owners?
4. Scenario planning is a common tool used to evaluate strategic risk. Follow the steps outlined in Appendix D for one scenario. Did your opinion on the scenario change after using this tool?
5. Contracts are key to the hog finishing operation. What are the opportunities and risks associated with this and how might they be managed?
6. Appendix E shows four key components of a contingency plan. Provide an example for Deer Creek Farm.

Appendix A:

2012 Corn and Soybean Budget

Revenue		**Carroll County**		**TOTAL**
ITEM		**Corn**	**Soybeans**	**Total**
Price Per Bushel		$ 7.45	$ 14.60	
Yield (bu/acre)		115.5	42.3	
Sales Per Acre		$ 860	$ 618	
Number acres		820	820	1640
Total Sales		$ 705,590	$ 506,416	$ 1,212,005
Direct Payments		$ 26,659	$ 14,046	$ 40,705
Counter-cyclical Payments				
target rate		$ 2.63	$ 5.80	
year price- NASS data		$ 115.50	$ 115.50	
calculation of payments		$ (12,941,837)	$ (4,222,217)	
actual payment		$ -	$ -	$ -
Total Government Payments		$ 26,659	$ 14,046	$ 40,705
TOTAL RECEIPTS				**$ 1,252,710**
VARIABLE COSTS				
		Corn	**Soybeans**	**Total**
		per acre		
Fertilizer		$ 193	$ 93	$ 234,520
Seed		$ 107	$ 62	$ 138,580
Chemicals		$ 38	$ 29	$ 54,940
Dryer fuel and handling		$ 39	N/A	$ 31,980
Fuel		$ 27	$ 12	$ 31,980
Repairs		$ 17	$ 12	$ 23,780
Hauling		$ 18	$ 5	$ 18,860
Interest		$ 6	$ 7	$ 10,660
Insurance/misc		$ 33	$ 23	$ 45,920
TOTAL VARIABLE COSTS				**$ 591,220**
FIXED COSTS				
ITEM			**Total Per Acre**	**Total**
Machinery replacement		$ 83	$ 83	$ 136,120
Drying/Handling		$ 12	$ 12	$ 19,680
Family and Hired Labor		$ 52	$ 52	$ 85,280
	rental rate	$ 379	$ 379	
Land rental cost	rented	0%	0%	$ -
Opportunity cost of land	owned	100%	100%	$ 621,560
TOTAL FIXED COSTS				**$ 862,640**
TOTAL COSTS (INCLUDING OPPROTUNITY COST OF LAND)				**$ 1,453,860**
NET RETURN WITH OPPROTUNITY COST OF LAND				**$ (201,150)**
NET RETURN WITHOUT OPPROTUNITY COST OF LAND				**$ 420,410**

Appendix B:

2012 Hog Budget

Basic Information	
4000	# hog capacity at one time
3	months to bring to market weight
12000	hogs brought to market weight annually

REVENUE

ITEM		**total per year**
Contract Arrangement		
	Base payment	$162,000.00
TOTAL RECIEPTS		**$162,000.00**

Expenses

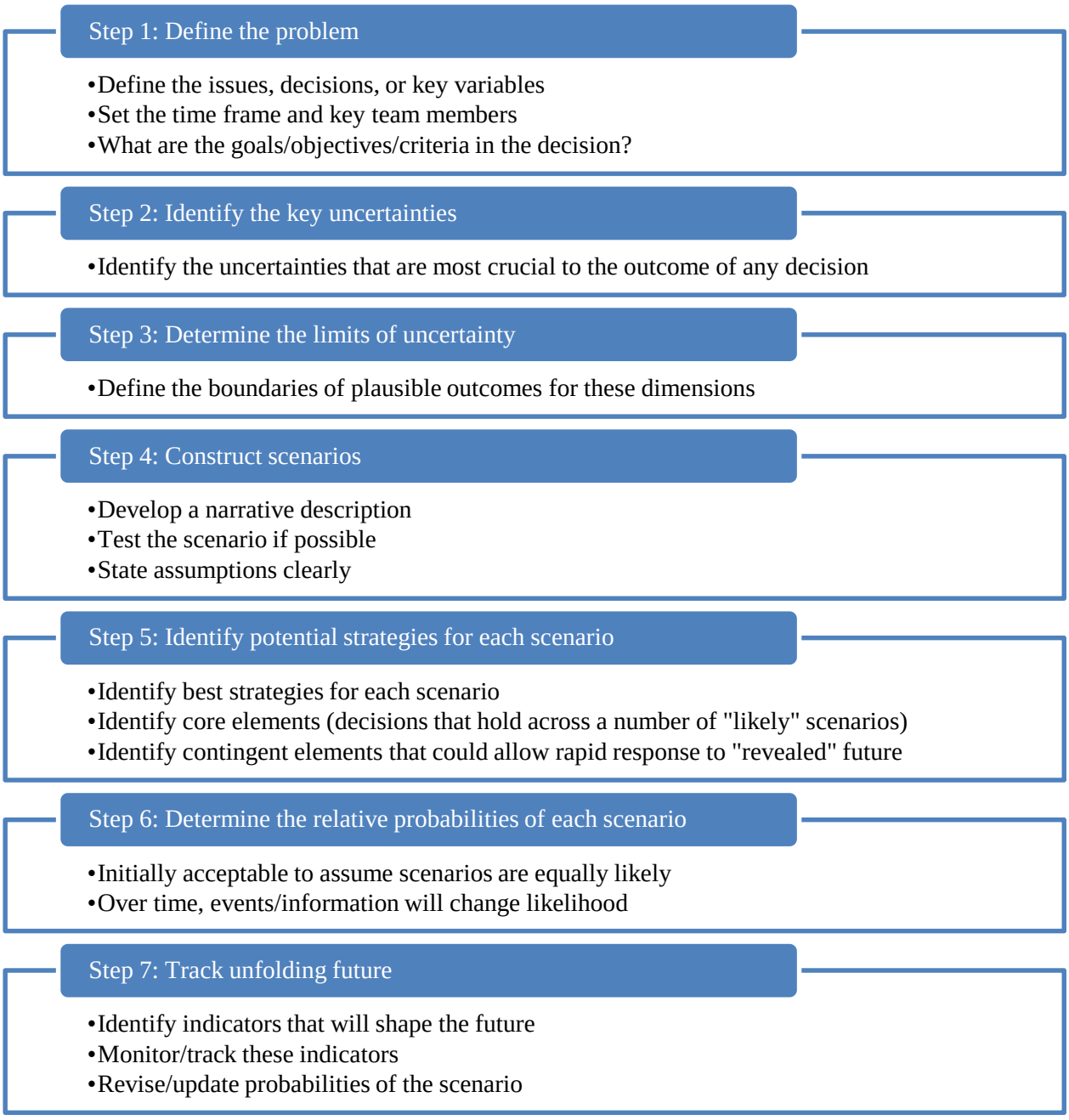
ITEM		**per head**	**total per year**
	Utilities, repairs, and maintenance	$1.71	$20,500.00
	Property tax and insurance	$1.00	$12,000.00
	Labor	$7.50	$90,000.00
	Savings on Manure Use	-$2.20	-$26,400.00
	Depreciation	$0.17	$2,033.00
TOTAL EXPENSES		$8.18	**$98,133.00**
NET RETURN			**$63,867.00**

Appendix C:

2012 FINANCIAL RATIOS

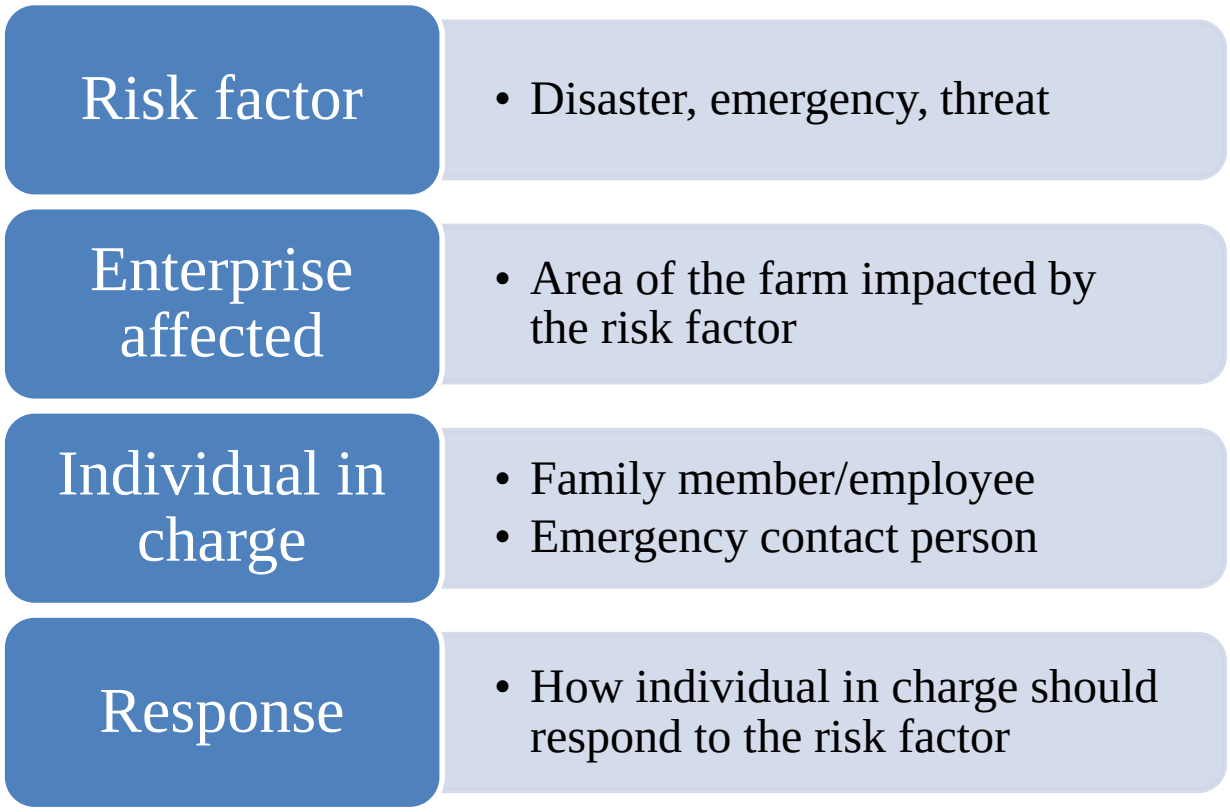
Liquidity		
	Current Ratio	403.16%
	Working Capital	$454,733.20
	Working Capital to Gross Farm Revenue	32.85%
Solvency		
	Debt/Asset Ratio	6.45%
	Equity/Asset Ratio	93.55%
	Debt/Equity Ratio	6.90%
Profitability		
	Net Farm Income	$483,654.66
	Rate of Return on Farm Assets	4.06%
	Rate of Return on Farm Equity	3.83%
	Operating Profit Margin	25.47%
	EBITDA	$527,755.86
Financial Efficiency		
	Asset Turnover Ratio	15.96%
	Operating Expense Ratio	61.87%
	Depreciation Expense Ratio	0.15%
	Interest Expense Ratio	3.04%
	Net Farm Income Ratio	34.94%
Repayment Capacity		
	Capital Debt Repayment Capacity	$567,419.46
	Capital Debt Repayment Margin	$438,025.24
	Replacement Margin	$434,619.46
	Term-Debt Coverage Ratio	438.52%
	Replacement Margin Coverage Ratio	216.41%

Appendix D: Scenario Planning



Adapted from: Boehlje, Olynk Widmar, and Gray (2012) "Scenario Planning," *Structuring Decisions: Innovating Through Turbulence*, September 11-13, 2012, Purdue University, Center for Food and Agricultural Business.

Appendix E: Sample Contingency Plan Outline



Teaching Note

Deer Creek Farms: A Case Study Illustrating Strategic Risk Management in Agriculture

Agricultural producers today are confronted by an unpredictable and risky future. Rising farmland prices and input costs, increasing yield uncertainty, highly variable commodity prices, rapid technological change, growing international competition, expanding global markets, and varying government regulations create an environment of uncertainty (Roucan-Kane, Boehlje, Gray, & Akridge; Erikson & Boehlje). Producers seek tools to cope with these risks. While some of these may be mitigated using traditional risk management tools such as insurance and futures markets (Boehlje, Gray, & Detre), strategic risk management skills are also needed to face these challenges.

The key elements of strategic risk are monitoring for risk, identifying probable risks, formulating a set of strategies, and implementing the correct strategy(s) when appropriate (Roucan-Kane, Boehlje, Gray, & Akridge). While in the planning stage, the actual risk outcomes and their probabilities of occurring are many times unknown. This requires that producers develop multiple strategies for each potential outcome. By examining the interactions between all potential risk outcomes and strategies, producers create a multi-dimensional plan for managing risk (Boehlje, Gray, & Detre). The strategic plan developed should incorporate traditional risk management tools and creative strategies which may include enterprise diversification, adaptability, vertical integration, and maintaining a certain level of liquidity (Erikson & Boehlje).

Relationship risk, regulation risk, and technical uncertainty are examples of what can be effectively managed using strategic risk management tools (Erikson & Boehlje). These risks compose a growing percent of the challenges facing producers and are not typically managed

with traditional risk management tools such as insurance and futures markets (Boehlje, Gray, & Detre). For this reason, it is critical that agricultural producers become trained in strategic risk management.

Objective for Writing Deer Creek Farms Case Study

The examples illustrated through the Deer Creek Farms case study will assist agricultural producers as they monitor, identify, and manage strategic risk on their farms. Supporting materials will introduce three critical tools of strategic risk management: scenario analysis, contingency planning, and downscoping/exiting options.

The target audience of Deer Creek Farms is crop and/or livestock producers. The case is one in a series focusing on different areas of risk producers' face. The case and supporting materials will be used in face-to-face Extension programs and delivered online. This case is also suitable for undergraduate and master's level agricultural finance or agribusiness courses.

Deer Creek Farms is a hypothetical case based on a "typical" farm in Carroll County, IN. The desire to provide detailed financial information for analysis limited the authors' ability to use data and names from an existing farm, but the case is written with the desire to be as realistic as possible.

Learning objectives

Readers will acquire the knowledge to:

- Identify potential strategic risks
- Use scenario planning, contingency planning, and downscoping/exit options
- Adopt strategic risk planning to their farm or business

How the learning objectives will be realized

1) The producer will be introduced to strategic risk management and risk tolerance concepts (supporting materials will be provided).
2) They will read the case. A set of guided reading questions are available.
3) They will review material covering scenario planning, contingency planning, and downscoping/exit options.
4) At the end, the producer may be asked a set of more difficult questions. The questions will generate further analysis of the case study and the concepts presented. A quiz may follow or precede these questions.

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