Crooked Creek Farms and Hurricane Michael

Heather Young, Graduate Student, University of Florida J.C. Bunch, Associate Professor, University of Florida

Suggested Citation

Young, H., & Bunch, J. C. . (2022). *Crooked Creek Farms and Hurricane Michael*. Global Education Lab. https://www.globaleducationlab.org/portfolio/young

This material is based upon work that is supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, under award number 2019-70003-29092. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture.

Background

Crooked Creek Farms, owned and operated by Steve (Beaver) Yoder, is a stocker cattle and brood cow farm located in Altha, Florida, about 50 miles from Panama City. Between 1995 and 2013, Beaver Yoder transitioned from dairy farming into operating 500 acres of row crops and 800 acres of grazing land for his 900 head of beef cattle. More recently, he has switched to solely focusing on running cow/calf pairs, preconditioned, and stocker beef cattle on grazing land he contracts with other area farmers and ranchers. He now purchases un-weaned and weaned calves and older cattle to precondition in the fall. He grazes them on harvested row crop and re-seeded winter forage fields throughout the winter until mid-spring when he sells the group of cattle and purchases again in the summer.

Altha is a little Calhoun County town in the Florida Panhandle next to Bay County. In 2018 there were only 509 Altha residents which has since dropped to 458 (World Population, 2021). Bay County is mainly known for Panama City Beach, a popular tourist destination, and its oceanfront scenery; however, in 2018, Bay County was also recognized as almost being wiped off the map by a Category-5 hurricane, Hurricane Michael. This county is rebuilding and slowly regaining its shoreline presence three years later. They are far from complete, and there will never be "a back to normal" (B. Yoder, personal communication, September 16, 2021). Neighboring county, Calhoun County, was spared no less, with close to 1,000 of their businesses (including schools) reporting damages and 30% of their residents reporting home damages (Calhoun, 2020). A significant source of income for many was lost due to the effects of the hurricane's damaging winds on their timber lots. The 567 square miles of Calhoun County were already classified as financially constrained and as a "Rural Area of Opportunity," so the hurricane was just another blow to their economy. According to the Florida Department of Economic Opportunity, there is still an unmet need of \$172 million for Calhoun County (Calhoun, 2020).

Hurricane Michael

Hurricane Michael has left its mark on Bay County and surrounding areas that will never fade. The vast amount of damage caused by Michael truly challenged citizens' willpower, persistence, trust, and resilience. Decisions following Hurricane Michael would shape the future of Crooked Creek Farms and the community.

Overall statistics

Hurricane Michael formed October 7, 2018 and made landfall on October 10th. This storm intensified from a tropical storm rating to a category-1 hurricane in one day. Then in a matter of six hours, Michael's winds intensified to 100 mph, increasing to a category-2 hurricane. This hurricane did not indicate it would be more than these residents could handle as it started to lull on October 8th. However, Michael was up to a category-3 hurricane headed straight for Bay County by the following evening. By the time it made landfall on the 10th at 5:30 in the evening, the hurricane's eye was set to go directly over Panama City, accompanied by 160 mph winds

and 9–14-foot storm surges. The city experienced significant damage to the shorelines, power outages, and \$25 billion in damages (NHS, 2018; Morgan, 2019; NOAA, 2019). Michael was still a category-4 by the time it reached the Alabama/Georgia state line and did not downgrade to a category-1/tropical storm until it reached the middle of Georgia early the following day.

Damage to Crooked Creek Farms

Things were going well for Yoder until the fall of 2018 brought in a Category 5 hurricane. Beaver Yoder's operation suffered structural damages, long-term animal health impacts, and 21 days of power outages. The Yoder's had to wait for neighbors to come with their tractor to lift the remains of Beaver's equipment shed off of his tractor so he could start to unbury the rest of his equipment and remove fallen trees from fences. After working through the cleanup and continuing the rebuilding process, Beaver Yoder and his family will eventually recover from this natural disaster with a true test of strength and dedication. There was not much rain that accompanied the actual hurricane; however, a lot came after the hurricane, which further deteriorated the quality of hay and feed available after the storm and into the next crop season. Insurance was another area that created some frustrations. Often, replacement costs are not updated on policies which results in underinsured equipment and structures.

Initial Management Responses

While many residents rushed to evacuate after a change in the projected path and intensity, Beaver Yoder and his family stayed at the farm because he knew he would have animal care responsibilities to attend to as soon as the storm passed. He knew he would not have been able to leave the area and return immediately as there was no guarantee he would be able to make it back to his farm due to the damages and debris from the hurricane. For example, after the storm passed, it took his cattle hauler/business partner a few days to get from Alabama to his farm. Beaver decided to move 800 head of cattle back to Alabama to ensure they would receive adequate feed and water, in addition to reduducing Beaver's responsibility as worked to repair fences and pastures. It has been a long road to recovery for this town to deal with setbacks and miscommunications, or lack of communication, between government officials, FEMA, and the residents. Beaver told stories of how an Extension agent was working at her desk while water was dripping from the ceiling as she was trying to coordinate supplies and equipment for livestock and water for civilians. Livestock groups and associations were able to provide supplies before government organizations could, and it was the local community members who worked together to clear the roads and gather up the stray livestock.

Future Plans

Beaver mentioned he would highly consider future management plans and recommend electricity sources, fencing and pasture layouts, and surface water availability to others. Beaver would like to re-design his fencing layout to be more cognizant of water access and the proximity of trees to the fence lines and have extra gates or corral panels on hand to create holding pens if needed. Unfortunately, most of his fencing had been designed to border tree

lines to provide shade for the cattle; this ultimately became an issue as old and massive live oak trees toppled onto his fence.

Beaver is looking to switch all his electric fences over to solar-powered units, so electricity still gets to the fences even when the main power goes down. He is trying to get Natural Resources Conservation Service (NRCS) to research the availability and reliability of solar well pumps which will eliminate the need for generators to pump the water for the cattle. Electricity was a major issue as powerlines were down or destroyed, transformers laid in the middle of the roads, and generators were damaged from falling debris or were not available at all. If generators were available, they were already claimed for household support to preserve food and provide water; many farmers and ranchers were rotating their generators from the house to the pastures, with some even sharing with their neighbors. Throughout the conversation with Beaver, a summative phrase was risk management and minimizing your risk.

Management/Leadership Considerations

Leadership and communication skills are vital in making it through any disaster, especially one of this magnitude. There has to be order, command, quality decision-making abilities, ability to perform under pressure, and experience within those leaders. There were numerous occasions where choices needed to be made on the fly and under some of the most stressful moments in many peoples' lives. In times such as this, leadership abilities are put to a true test, and quick decisions also need to consider their impacts on the future. Within this case study, students will be provided the foundational groundwork to analyze the decisions made and their correlation to leadership abilities.

Based on the four-frames of Bolman and Deal's (2013) model for analyzing leadership instances encountered by individual citizens and organizations, this case study will discuss the four leadership frames and encourage students to incorporate them into their solution. The four leadership frames include the symbolic, political, human resources, and structural frames.

The *symbolic frame* focuses on the organization's culture, values, and symbols. Symbolic leadership is focused on the history, vision, and mission of a family business or an organization. This combination is often thought of as the 'thing' that holds everything together, that one allencompassing string that is woven through everything else. The *political frame* focuses on internal and external organizational relationships. This frame pertains to how resources are distributed throughout an organization or business and how power and authority can affect an organization's functionality. The *human resources frame* focuses on the people. It pertains to education, skill development, and knowledge, ensuring the right people are in the right positions and doing the work that best suits their skills, abilities, and interests. The *structural frame* focuses on organization. This frame is about making sure people are in roles that are best suited for them and the organization as a whole—taking an in-depth look at how the hurricane-impacted Crooked Creek Farms allows students to examine the leadership frames and choices made.

Symbolic Frame

The aftermath is visible three years later; still being cleaned up, rebuilt, demolished, and even abandoned. The impacts of the storm were not only physical but emotional too. Farmers and ranchers were forced to make incredibly difficult decisions to give up their dreams and sell what they had, because they could not get ahead enough to fix the damages from the hurricane. There were feelings of guilt, shame, failure, and disappointment. Some could not continue their family's legacy of farming or ranching. Beaver's beliefs, values, and culture impacted his decisions as a farmer/rancher/business owner. Farmers and ranchers are very independent and self-sufficient people, so having to rely on someone else to get back to 'business as usual' was difficult for Beaver. He utilized his faith, family, and friends and their encouragement and willingness to help wherever they could to make it through this challenge.

Political Frame

Some frustrations they experienced surrounded the distribution of emergency supplies and monetary aid before and following Michael's landfall. Independent groups, such as the Cattleman's Association, Farm Bureau, and utility companies from other states were able to connect with individuals to determine what needs were not being met. They looked for areas where they could make the most impact. The Cattleman's Association was able to deliver pallets of water to the small town of Altha before the state or government could deliver resources due to road blockages and other travel and logistical complications. Another group heard about the local farmer/rancher's needs and had a truckload of mineral lick tanks and salt blocks delivered without ever being directly asked to help. A group of Mennonites from Ohio spent a week helping with major cleanup by offering chainsaw work and use of other large machinery. They were able to lift building pieces off farmers' machinery sheds. Some of this machinery was necessary for the cleanup inaccessible. The agricultural industry is a small, tight-knit community, but their relationships prove critical for recovery and survival.

Human Resources Frame

Beaver worked closely with their local extension agent, who helped them immensely to coordinate building and fencing supplies and voluneteers who offered time and labor to help those in need. It was recognized that without strong communities, family, friends, relationships, friendships, and willing organizations to help people make it through situations like these, there would not be the 'grit' just to keep plugging along. Morale would suffer severely if individuals started to feel like they had to combat the entire situation on their own without support from others. Beaver welcomed people who were already familiar with handling and moving cattle and knew what needed to be done without being told. Friends and community members cleared six miles of I-10 with tractors and skid loaders so supplies could get through to places in need. Post-Hurricane Michael, farmers and ranchers were experiencing a whole new group of weeds that they had never seen or managed before. Farmers and ranchers utilized Cooperative Extension specialists for their educational assistance.

Structural Frame

Crooked Creek Farms is still in existence and was not completely wiped off the map; however, that does not mean they did not suffer damages. As a grazing operation, fencing, shade, water, and feed sources are all critical needs. Fences were damaged, and the electricity was out for the fencers; beef cattle were wandering down the sides of roads and out in other fields or croplands. Getting the fences and electricity back up was high on the priority list; water was the next immediate need to be addressed. In order to pump water to the various stock tanks, generators were hooked up. Most families only had one, maybe two, or no generators, and if they had them, they were already being used to provide electricity to homes. By the end of the 21 days of no electricity, their town had gathered 18 generators for people to utilize. Beaver and his team used eight generators just to power the well pumps to get water for the cattle.

The Problem

Crooked Creek Farms would like to create an emergency preparedness/management plan. You should consider the needs of the livestock and the individuals caring for them, along with their own families and homes. There are structural design changes, fencing materials, locations, and relation to water sources; equipment placement in preparation for the storm's arrival, to name a few areas. Provide three recommended changes you would implement for the next natural disaster. The following questions are provided to guide you:

- What are the requirements for successfully grazing beef cattle in the Florida Panhandle?
- How would your proposal be different if this were an equine or dairy farm?
- What would it be like operationally to manage a beef cattle farm during and after a natural disaster?
- What leadership issues might surface related to the management of a beef cattle operation after being impacted by a natural disaster?
- How were leadership skills beneficial to the rebuilding and recovery process? How could they have been better?
- How could an emergency management plan be implemented in the event of another hurricane or natural disaster?
- Identify examples of the resiliency of those within the agricultural industry whom a natural disaster has impacted.

Leadership Lens

Structural

- O What were some communication channels utilized?
- o Were there channels missing, or could they have been relayed differently?
- What were some difficulties Beaver and others faced when working with policies for disaster aid?

• Human Resources

- o Are there trainings that could have been beneficial for Crooked Creek Farms?
- Post-Hurricane Michael, farmers and ranchers experienced a new group of weeds never seen or managed before. It was mentioned they utilized their cooperative extension specialists for educational assistance; what other trainings do you think might be beneficial to Beaver and others in affected areas?
- How do you think the inability to make decisions in the 'heat of the moment' impacted the experience?
- o Can you identify what resources were made available to Beaver prior to and post-event?

Political

- O How did the state and department of agriculture help in the recovery?
- O Who had the power in this situation?
- O Who or what had the political power to make decisions?
- What roles did FEMA and FSA play in the preparation and recovery/rebuild processes?

Symbolic

- "Ag is good to ag" and "farmers rallying around each other" are common expressions heard within the industry. How is being a rancher symbolic?
- o How do you think Amish cultural values and views pride and independence?
- o How do you think this impacted his decision-making abilities and resilience?
- o Do you think Beaver values his family's history with the farm?
- How do you think Beaver's relationship with everyone, not only close friends and family, impacted their response and recovery?

Combined

- What technical trainings could Beaver Yoder seek that would compliment and improve his leadership abilities?
- How might the ways in which Beaver operates his business assist other farmers/ranchers in the area?

Synthesis

- You have been asked to create an emergency management plan for Crooked Creek Farms.
- In a group, students will create an emergency management plan addressing the issues and questions mentioned previously.

References

- Bolman, L. G., & Deal, T. E. (2013). *Reframing organizations: Artistry, choice, and leadership.*John Wiley & Sons.
- Calhoun County Board of County Commissioners. (2020, September). *Calhoun county long-term recovery plan* [draft]. https://calhouncountygov.com/uploads/2020/09/draft-calhouncounty-long-term-recovery-plan.pdf
- National Hurricane Center and Central Pacific Hurricane Center (NHC). (2018, October 10). Hurricane Michael intermediate advisory number 16A. https://www.nhc.noaa.gov/archive/2018/al14/al142018.public a.016.shtml?
- National Oceanic and Atmospheric Association (NOAA). (2019, April 19). *Hurricane Michael upgraded to a category 5 at time of U.S. landfall: Post-storm analysis estimates sustained winds of 160 mph.* https://www.noaa.gov/media-release/hurricane-michael-upgraded-to-category-5-at-time-of-us-landfall
- U.S. Climate Data. (2018). *Climate Panama City*. https://www.usclimatedata.com/climate/panama-city/florida/united-states/usfl0392
- World Population Review. (2021). *Altha, Florida Population 2021*. https://worldpopulationreview.com/us-cities/altha-fl-population