

DESIGNING A BEEF TRACEABILITY SYSTEM  
VIEWED FAVORABLY BY COW-CALF PRODUCERS

By

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Abstract: Most beef in the US is not traceable in that beef sold at the grocery store cannot be traced back to the farm where the live animal was raised. Traceability could provide many benefits to the beef industry but is often opposed by cow-calf producers. To better understand what type of traceability systems would be supported by cow-calf producers, Oklahoma, Texas, and Kansas cow-calf producers were administered personal interviews. The sample includes 15 producers who participated in the Integrity Beef Sustainability Pilot project, which includes a traceability component. The interviewees were asked a variety of questions about their experience in the project and traceability in general. Questions include, but are not limited to, the following. What elements of the pilot project did they like or dislike? Based on their experience with the actual pilot program, how would they design an industry-wide traceability program? If a large-scale traceability system were established within the US, should the United States Department of Agriculture (USDA) be involved? The interview responses suggest that the pilot program was viewed favorably by the producers and can serve as a guide for establishing industry-wide traceability programs. A favorable program should involve a non-profit institute the producers trust.

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## CHAPTER I

### INTRODUCTION

#### **Problem Identification and Explanation**

A traceable beef supply chain enhances consumer value by providing more information on the product and improving food safety. The lack of an effective traceability system is costing the United States in terms of lost export revenue. In 2004, the United States beef industry lost between \$3.2 billion and \$4.7 billion because of export restrictions (Pendell et al 2010). The export restrictions were mainly caused by concerns about the safety of food in the United States. An effective traceability system could diminish these concerns by providing consumers information about how their food is produced. Pendell et al (2010) elaborates on how a disease outbreak of bovine spongiform encephalopathy (BSE) in 2003 caused 53 countries to ban United States cattle and beef exports. Had a traceability system existed, those cattle infected could have been more quickly identified and depopulated, reducing the amount of time before those beef exports resumed. The European Union was the first to develop a beef sustainability and traceability program in response to a BSE outbreak (Crandall et al 2013). The European Union's traceability system encouraged other countries to follow suit including Australia, Uruguay, Canada, and New Zealand (Crandall et al 2013). Comparatively, the United States did not have as large of a BSE outbreak as the European Union which is one reason why other countries have more advanced traceability programs than the United States. Given the possibility of future animal health incidents, like Foot and Mouth disease, having a traceability system in place can help mitigate damages. An effective traceability system facilitates an efficient and accurate



response in the case of an animal or food safety incident. In 2006, there was an *E. coli* outbreak in spinach that an effective traceability system traced to one of four farms (Pouliot and Sumner 2008). The production of spinach and the price paid to producers fell to the 2005 levels in two months, and the consumption of bagged spinach decreased. While this resulted in losses, the losses would have been larger had the originating farm been impossible to identify (Pouliot and Sumner 2008).

The benefits of traceability extend beyond protecting export markets. Consumers gain more knowledge about cattle and meat. Production may increase their confidence in farms and meatpackers. Food safety and animal welfare requirements are of considerable concern to consumers (Fritz and Schiefer 2009). Traceability systems can help consumers correctly identify the food items of concern and modify their spending patterns accordingly. Traceability adoption allows other types of information to be more easily passed along the supply chain. Producers receive benefits from adopting traceability. An example is carcass quality, which might allow producers to improve the quality of their production and increase consumer demand. A traceability system improves communications throughout the entire beef supply chain.

The vast majority of United States beef is not traceable, though, due to a lack of interest by the beef industry, including cow-calf producers (Adam et al 2015). Producers of live animals have a number of concerns about a traceability system, including a belief that the extra cost of implementing a traceability system is more than the additional revenue generated from it (Adam et al 2015). Cow-calf producers absorb most of the initial costs because they bear the responsibility of tagging livestock. The benefits of the traceability system are mostly received by processors and producers further down the beef supply chain (Adam et al 2015). Privacy issues are a major concern for cow-calf producers. Producers are concerned about who will have access to the information such as, government agencies or competitors who could use the information to harm them (Schroeder and Tonsor 2012). Another major issue producers are worried about is tort

liability. In the past, a particular animal or food health incident could only be traced to a certain region (Crandall et al 2013). The blame for an animal or food health incident could be distributed throughout the entire region or the entire industry. Now, an animal or food health incident can be traced back to a specific farm leading a single cow-calf producer to pay entirely for the outbreak (Crandall et al 2013).

Programs like the National Whole Chain Traceability Institute (NWCTI) and the Proprietary Centralized Data Whole Chain Traceability System (PCD-WCTS) can help eliminate some of these concerns. They employ technologies that allow owners of the data to control who has access to the data and the extent of the data others can see (Adam et al 2015). Both technologies allow for two-way information flow between producers and consumers even when there are multiple entities in the same supply chain. For example, producers can share information on platforms where the consumer can provide instantaneous feedback about the product. The NWCTI is managed by a third party and not the government (Adam et al 2015). The PCD-WCTS can direct funds to producers who bear the most cost by allowing processors to provide premiums to producers who participate in a traceability system (Adam et al 2016). Newer technologies such as radio frequency ear tags and information technology systems have reduced the costs of implementing a traceability program in beef cattle.

These newer information technologies have not translated into cow-calf producer enthusiasm for traceability, but some more progressive producers are cautiously experimenting with it. The Integrity Beef Sustainability Pilot project is an example. This project incorporated members from every level of the beef supply chain, including cow-calf producers from Oklahoma, Kansas, and Texas. The project provided a unique opportunity to elicit feedback from cow-calf producers' experience in the project, how to encourage higher participation in such programs, and views on traceability in general. This research interviews those cow-calf producers

who participated in the project to better understand beef traceability issues, with the following research objectives.

### **Research Objectives**

The overall objective is to better understand what type of beef traceability program would be viewed favorably by cow-calf producers. This objective is pursued by conducting one-on-one interviews with cow-calf producers from the southern plains (Texas, Oklahoma, and Kansas) who participated in a pilot traceability program. The specific objectives of the interviews are as follows.

- Document the attributes of the pilot traceability program that producers found favorable and unfavorable.
- Employ a series of questions designed to elicit their views on how to design an industry-wide traceability program in which they would participate.

### **Integrity Beef Sustainability Pilot Project Description**

This study is unique in that it deliberately focuses on cow-calf producers who have experience in a pilot traceability program, as opposed to other studies (Trautman, Goddard, and Nilsson 2008; Calder and Marr 1998; Davies 2004; Farm Foundation 2004; Fearn 1998; Spriggs, Hobbs, and Fearn 2000) whose population consists mostly of producers who have not participated in such a program. The views of this study's sample will be influenced by the particular way this pilot project was conducted, and so a detailed description of the project is necessary for properly interpreting the interviews.

The Integrity Beef Sustainability Pilot project began in the fall of 2017 with the goal of establishing a model supply chain from the cow-calf operation to the retailer, but on a pilot-scale. The ideals motivating the project included the voluntary sharing of information at each point in the supply chain as to facilitate cooperation in the shared goal of improving product quality,

consumer confidence, and sustainability. The information shared included the flow of individual cattle throughout most of the supply chain, production information, the quality of the meat, and the sustainability practices employed.

The project included actual ranches and companies from each level of the beef supply chain: cow-calf producers, feedlots, meat packers/processors, wholesalers, and retailers. A non-profit research organization, the Noble Research Institute (NRI), oversaw the data collection and played a leading role in the information sharing process. Most of the cow-calf producers belonged to the Integrity Beef Program, an organization dedicated to improving beef quality and sustainability by the identification of best management practices. For two years, the 40 participating producers sold a group of calves through the program. The first calf crop was born in 2017 and slaughtered in 2018; the second group one year later. While this study only interviews the cow-calf producers involved in the project, it is important to understand the other members further down the supply chain.

The Beef Marketing Group (BMG) purchased calves from the cow-calf producers and raised them in a traditional feedlot setting until they were ready for slaughter. The feedlot provided similar standards of care for all cattle so that the performance difference between cattle could be mostly attributable to production decisions made at the cow-calf level. Tyson Foods Inc. then purchased and processed the cattle, using the meat to provide meat trimmings that would remain in the project for sale as ground beef and selling the other portions of the carcass in their normal supply chain outside the pilot project. Cuts such as steak and brisket are not part of the pilot, only ground beef. Tyson Foods then sold the beef trimmings to Golden State Foods, who processed the beef trimmings into hamburger patties and then sold them to McDonalds.

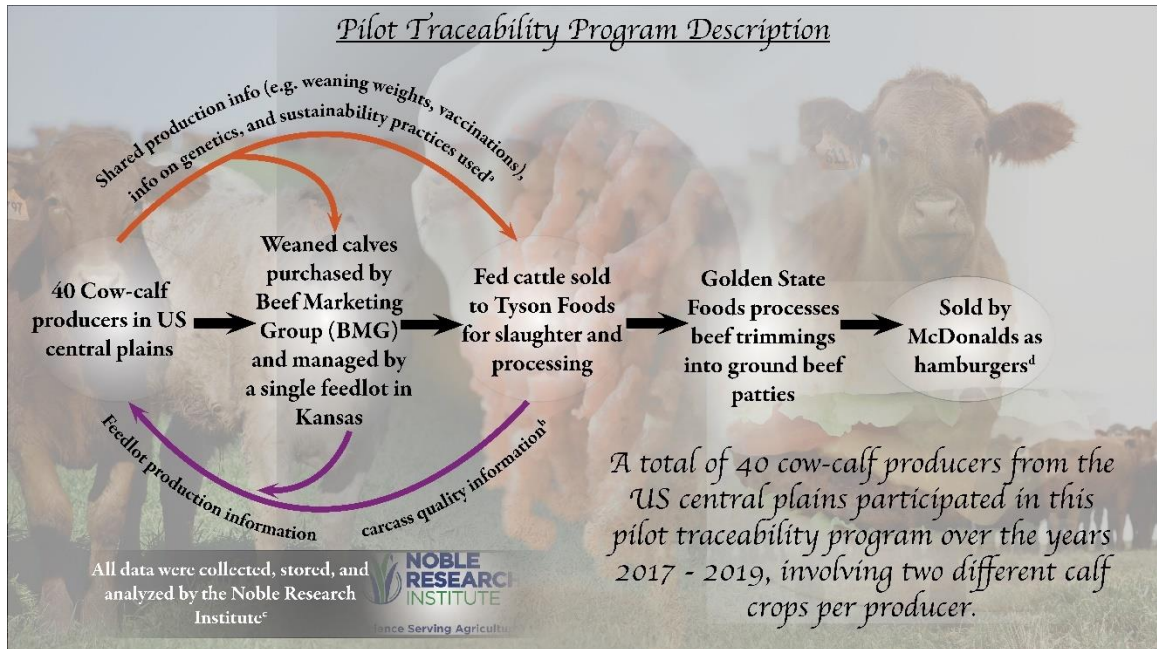
Playing an important role throughout this pilot supply chain was the NRI, a non-profit research organization conducting agricultural research. NRI coordinated the data collection taking

place on the ranches, the feedlots, and the Tyson Foods processing facility. The data included, but are not limited to, the following (more details on the data collected are provided in subsequent sections).

- On the cow-calf operation: birth and weaning weights, health care activities like vaccinations, and on-farm sustainability practices.
- At the feedlot: beginning and end weights; health care activities like vaccinations, culls, and disease.
- At the processor: carcass weights, carcass grades, other carcass quality indicators.

These data were then shared through NRI between the supply chain segments above, but in a way to protect individual cow-calf producer confidentiality. For example, the cow-calf producers would periodically receive information on weight gain and mortality rates on their cattle, with the same information for the average of all other producers' cattle. Producer A was able to compare their mortality rate against the average for all other producers but not producer B. The same method of information sharing was conducted by NRI for other considerations like carcass quality.

As the beef trimmings were passed downstream from the beef packers the precision of traceability was reduced. While each carcass could be linked back to cow-calf operation from where the calf was born, the production of ground beef from trimmings does not allow such precision. As such, all that was known was that the trimmings and the beef patties originated from the pilot program, but any one beef patty could not be linked to a specific producer or head of cattle. Figure 1 depicts the pilot project and type of data collected. The figure shows how data flowed from producer to McDonalds, type of information collected at each point, and indicating the producers are who we interviewed.



*Figure 1 Pilot Traceability Program Description*

NOTES

- a. Information included weaning weights, age at weaning, illnesses experienced, all vaccinations, dehorning or castration practices (age and type). Sustainability practices include information like forage management plans.
- b. For feedlot: date cattle arrived, weight at different ages, morbidity and mortality, feed consumption. For beef packer: kill date, dressing percentage, marbling score, hot weight, ribeye area, backfat, and beef grade.
- c. NRI would provide each producer with detailed data on each of their cattle's performance in the feedlot and at the slaughtering plant. Also provided was their ranch's performance on these measures relative to the other ranches in the pilot project, as well as another group used for comparison.
- d. McDonald's did not advertise these hamburgers as traceable or promote them in any special way.

## *Sustainability*

While this research focuses specifically on traceability, sustainability was an important part of the pilot project and merits discussion, as any industry-wide traceability program is likely to include sustainability components. Participants in the Integrity Beef Sustainability Pilot project are aligned with the vision, indicators, and metrics established by the United States Roundtable for Sustainable Beef (USRSB). The USRSB is a multi-stakeholder organization committed to improving the sustainability efforts of the beef industry (U.S. Beef Industry Sustainability Framework). Beef farmers and ranchers; companies involved in processing, distributing, and serving of beef; environmental organizations; academic institutions; and allied industries are some of the members that make up the USRSB. They are committed to making sustainability a profitable endeavor for both producers and businesses. The USRSB defines sustainable beef as an economically viable, socially responsible, and environmentally sound product that prioritizes planet, people, animals, and progress (U.S. Beef Industry Sustainability Framework).

For the beef industry to demonstrate its commitment to sustainability it must be able to make credible claims about sustainability practices. This involves documenting the farms from which a beef product is made and providing transparent data on what production practices are employed. Documentation and providing transparent data are less costly when a traceability system exists.

One of the products of the USRSB is the US Beef Industry Sustainability Framework (BISF). This is a set of guidelines for assessing beef sustainability. Its three major components are high-priority indicators, sector-specific metrics, and self-assessment tools (U.S. Beef Industry Sustainability Framework Summary). USRSB indicators are animal health and welfare; efficiency and yield; water resources; land resources; air and greenhouse gases; worker safety and well-being. The indicators apply to all segments of the supply chain. The indicators provide the

foundation for the U.S. Beef Industry Sustainability Framework. Metrics measure activities linked to each of the high priority indicators. The metrics were developed to address the unique characteristics of each segment of the value chain, outlining ways an operation or company can measure sustainability progress. For example, minimizing impact on natural waters is important for sustainability, and the metric used is whether there is, “a grazing management plan (or equivalent) being implemented that maintains or improves water resources” (U.S. Beef Industry Sustainability Framework Summary). The sustainability assessment guides outline the purpose, approach, and practical application of each metric. The supply chain sectors led in the creation of these additional tools and resources (U.S. Beef Industry Sustainability Framework Summary). Producers were expected to report on metrics for the pilot project. The assessment guides give producers practical tools to implement on their farms and ranches. However, because of this research focuses on traceability the sustainability dimension of the program is largely ignored.

#### *Cow-Calf Producers*

The Integrity Beef Sustainability Pilot project had 40 cow-calf producers who participated, most of whom belong to Integrity Beef Alliance. The cow-calf producers are from Texas, Oklahoma, and Kansas. The Integrity Beef Sustainability Pilot project offers a rare chance for producers to examine how their cattle performed in the feedlot and on the rail (i.e., carcass quality). The performance results are brought together across the entire beef supply chain. The pilot project allows for the connection of beef genetics (mostly Integrity Beef), health protocol, preconditioning to feedlot performance, and carcass results.

The pilot project provided background information about the cow-calf producers’ cattle, such as whether their sire was Integrity Beef qualified, if the producer had a grazing plan, if the producer was Beef Quality Assurance certified (a training program on best management practices), the health status of the herd, animal welfare practices employed, and preconditioning



expenses. Also included were other information less related to the performance of the cattle but useful for the producer, like whether the producer had a succession plan.

Of particular importance to cow-calf producers were data on weight gain and health. Data related to this information category include the following.

- Producers were required to provide their herd health information about vaccinations and other calf management practices. The producers were asked to be as specific as possible. The hope was for cow-calf producers to provide the exact brand of vaccine, the date of expiration, route and site of vaccination, and anything else that could help NRI learn about the calf. Details included particulars about blackleg vaccinations, dewormers, respiratory and shipping fever vaccinations, implanting, dehorning, castration, and any other boosters or procedures the calf had. The weaning process can be a source of stress for calves. Information was recorded about calf illnesses/problems and if animals had to be pulled or if the animals died. Information was then provided about the weaning stage of beef production.
- Weaning is when a calf is transitioned from a diet of his mother's milk to hay and grass, which typically happens when the calf is around 8 months and around 500 pounds. Weaning is a process to prepare the calf for the stocker stage of production, where it will be sold for market. The animals underwent a precondition program for the pilot project. A preconditioning program is when a cow-calf producer builds the health status of a weaned calf prior to sale and is typically a minimum of 45 days. The producers provide details such as, when the calf was weaned, the average weaning weight, when they were sold, the average weight when they were shipped, and the number of days they were preconditioned.
- Performance indicators were obtained by collecting weight data at different points in time and various financial information. This allowed the calculation of average daily gain, the

price received by the cow-calf producers, and average preconditioning cost. Accurate and descriptive records were required by cow-calf producers who participated in the Integrity Beef Sustainability Pilot project, in order for the feedlot company to provide information about the cattle.

### *Feedlot*

After the cow-calf stage of production, the cattle enter the feedlot stage of production. Cattle typically reach the feedlot when they are older than one year, although many cattle go to the feedlot when they are younger than one year of age. In the feedlot they are fed a ration typically consisting of grains, protein sources like dried distillers grain (DDGs), and hay. The cattle will be fed less hay and more grain the longer they are in the feedlot. For the Integrity Beef Sustainability Pilot project, cattle were sent to the Innovative Livestock Services Feedlot in Great Bend, Kansas. The feedlot kept records of which cow-calf producer the cattle originated from. Sex of the cattle, the date the cattle arrived, the percent shrink (weight loss during transportation), and various weight information were kept by the feedlot.

The feedlot kept track of production costs such as, feed ration, medicine, yardage, processing, insurance dues, cost per head per day, and the interest. The feedlot tracked performance data including health data. Information such as the carcass yield percentage, sales weight, and sales price was provided to all members of the project. Individual producers received the data pertaining to each of their cattle in the program, as well as the average across all producers. Cow-calf producers use this information to determine how their cattle fared at the feedlot and what problems they incurred.

### *Harvest*

The next stage of the project involved meat processing. All the cattle were sent to the Tyson Foods Inc. packing company in Garden City, Kansas, where they were harvested. The

meat packers provided the kill date, hot weight, dressing percentage, and the marbling score. The hot weight is the weight after the hide, internal organs, and head have been removed from the slaughtered cattle. Dressing percentage is the percentage of live animal weight that becomes the carcass weight at slaughter. The marbling score is the amount of visible fat found between muscle fiber bundles within the ribeye muscle, and is an indicator of meat quality. The yield and grade of side 1 and side 2, ribeye area, backfat, meat grade (e.g., Prime, Choice, or Select), date of the grade, and sex of the cattle were recorded. The carcass was then processed into various cuts, with beef trimmings (to be used to make ground beef) remaining in the project and the other cuts diverted into Tyson's conventional supply chain.

#### *Further Processing*

The beef trimmings were sold to Golden State Foods to be made into beef patties for McDonalds. In the future, the goal is to have consumers aware of the cow-calf producer who raised what they are consuming. Consumers gaining knowledge about farms and meatpackers can increase their confidence in the safety of their beef and know more about how their food is produced. Producers benefit by receiving information from consumers and can gear their production towards consumers' desires. Producers can observe how much of a premium, on average, consumers are willing to pay for traceable beef. Producers can see how profitable a traceable system can be. Currently, consumers are not given these assurances, especially with ground beef. For example, consumers might be given the information that maybe 5% of this ground beef came from this cow-calf producer, but most of the time there is almost no way of knowing the farms from which the beef were obtained. The beef industry and the Integrity Beef Sustainability Pilot project aim to provide better knowledge to consumers about the beef they consume.

#### *Retail*

The ground beef was sent to McDonalds and sold to consumers. However, consumers were not made aware that the beef was traceable and McDonalds made no efforts to publicize the program to its customers.

### *Summary*

In conclusion, the Integrity Beef Sustainability Pilot project incorporated members of every aspect of the beef supply chain. NRI managed data collection. BMG bought the cattle and managed them in the Progressive Beef System. Progressive Beef is a verified cattle quality management system that tries to create excellence at feed lots by focusing on animal welfare, food safety, and sustainability. Tyson Foods purchased the cattle and provided trimmings to Golden State Foods. Finally, Golden State Foods used the project beef to make beef patties for McDonalds. An effective traceability system improved communication between all members of the beef supply chain.

## CHAPTER II

### REVIEW OF LITERATURE

#### **The Need for a Traceability System**

Foodborne diseases accounted for 47.8 million illnesses, 127,836 hospitalizations, and 3,037 deaths in the United States in 2011 (Resende-Filho and Hurley 2012). Examples include the 2011 *E. coli* contamination of bean sprouts; the 2008 Peanut Corporation of American salmonella outbreak; and dioxins in European pork, poultry, and dairy products (Resende-Filho and Hurley 2012). One outbreak of Salmonella in spring of 2008 caused more than 1,300 people in the United States to get sick, and one reason for this outbreak was a lack of adequate records from links in the food supply chain which led to a delay tracing the cause of the outbreak (Adam et al 2015). Originally, the Food and Drug Administration and Centers for Disease Control and Prevention investigators identified tomatoes as the cause of the illness; a month later, the source of the outbreak was correctly identified as peppers (Adam et al 2015). Traceability is needed in beef to trace an animal disease outbreak such as foot and mouth disease. Complex supply chains are susceptible to adverse events that are sometimes catastrophic; therefore, it is essential to understand how the events happen (Skilton and Robinson 2009). Producers want these outbreaks controlled as soon as possible to reduce market uncertainty, and a traceability program is an important component of achieving this goal (Crandall et al 2013). A recall of certain food groups causes a decline in the consumption of the recalled product decreasing the price paid to producers, and consumers are unable to trust the food they consume is safe (Crandall et al 2013).

Animal health and food safety are the main factors why consumers demand a reliable beef traceability system (Fritz and Schiefer 2009). By allowing industries to trace the source of an animal or food health incident, producers are more likely to improve their food safety protocols, both reducing the frequency of an incident and the harm from any one incident (Adam et al 2015). Traceability systems matter in food supply because they limit the consequences of adverse events (Skilton and Robinson 2009). Adverse events cause consumers to become sick or die, disrupt markets, result in lawsuits, and erode the value of brands (Skilton and Robinson 2009). Traceability is also useful for non-human diseases, like foot and mouth disease, which can result in large industry losses and higher food prices.

Consumers receive benefits from improved traceability systems by consuming safer food and, when they are eligible, receiving compensation in case of an animal or food health incident (Pouliot and Sumner 2008). Consumers also want traceability because they want to know how their food is produced. Traceability systems gather information about product characteristics and production practices throughout the supply chain, and in some cases are enthusiastically embraced by producers. One example is Scotland, where producers have voluntarily embraced traceability after the region experienced a frightening outbreak of BSE (Calder and Marr 1998).

Models are needed to show the connection between traceability, food safety, and liability. Pouliot and Sumner (2008) used a model to show how improvements in traceability cause firms to improve food safety due to liability threats. Marketers receive benefit from traceability because their liability does not change. Marketers impose liability costs on producers creating incentives for producers to provide safer food (Pouliot and Sumner 2008). Producers are incentivized to participate in traceability systems by improving efficiencies in supply chain management, food safety and quality control, access to foreign markets, and new niche markets (Trautman, Goddard, and Nilsson 2008). An effective traceability program can help alleviate the aforementioned concerns. A traceability system will provide consumers better information about the food they

consume, which creates better accountability upstream in the supply chain and greater consumer confidence in the product. Producers can gear production towards consumer demand.

### **Consumers' Willingness to Pay for a Traceability System**

An effective traceability system costs more for producers to implement, but these costs can be offset if consumers are willing to pay more for information on food origin and its supply chain. Research has been conducted on willingness to pay of consumers for certain attributes related to beef traceability, generally finding that consumers will pay more for beef that is traceable. Dickinson and Bailey (2002) conducted a survey to determine if consumers are willing to pay more for traceability, transparency, and assurances (TTA) in red meat. Respondents valued specific TTA attributes or attribute combinations, more so than just traceability alone. The subjects valued food safety most, suggesting that safety guarantees may be most profitable for firms implementing TTA systems (Dickinson and Bailey 2002). Hobbs et al (2005) conducted a study on Canadian consumers' willingness to pay for beef and pork that has traceability assurance, food safety assurance, and on-farm production method assurance. Consumers were willing to pay for traceability assurance. The results suggested the economic value of the traceability and quality assurances were higher for beef than for pork, as consumers were more aware of food safety issues with beef than pork. Researchers found that consumers placed a premium on food items when combined traceability assurance with quality assurance and/or on-farm production methods (Hobbs et al 2005). Spence et al (2018) examined consumers' purchasing intentions and attitudes in England towards traceable minced beef/beef steak using the theory of planned behavior and documented positive attitudes towards traceable beef (Spence et al 2018). The theory of planned behavior is a psychological theory connecting beliefs to behavior. Attitude, subjective norm, and perceived behavioral control are believed to be determinants of intention. Consumers in the United States, Canada, and England share similar viewpoints when it comes to beef traceability (Spence et al 2018), but these similarities are not manifested in their

beef industries, as evidenced by the reluctance of the United States to adopt nationwide traceability programs. Contrast this with the European Union, Australia, Uruguay, Canada, and New Zealand, who have adopted such programs

### **History of Traceability Programs Internationally**

While most of the traceability programs established throughout the world were in reaction to the BSE scare, different countries implemented different approaches. Souza- Monteiro and Caswell (2004) compare the efforts made in different countries, finding that most beef exporting countries are implementing a traceability program to some degree to improve their positioning in international markets. Consider some of the traceability regulations passed in the European Union. In response to a BSE outbreak, the January 2000 White Paper on Food Safety considered the sharing of information in a global, harmonized, integrated, and transparent way along the beef supply chain, allowing members of the European Union to regain consumer confidence (Souza-Monteiro and Caswell 2004). Regulation (EC) 1760/2000 required all bovine animals to be enrolled in a beef traceability system from birth to death by January 1, 2000 (NCBA 2018). Regulation (EC) 1760/2000 details a mandatory traceability system which includes two individual animal ear tags, animal passports, and computerized databases (Souza-Monteiro and Caswell 2004). Records are required to be kept for a minimum of three years with national authorities verifying them. Each beef label must include a reference number or code, approval number and nationality of the slaughterhouse, and if the carcass is further processed the operations where it occurred. Commission Regulation 1825/2000 provided rules for the application of compulsory and voluntary beef labeling. The identification system must record information on arrivals and departures of livestock, carcasses, and meat cuts between operators (Souza-Monteiro and Caswell 2004). The European Food Safety Authority (EFSA) administers the program (NCBA 2018). Premise identification and animal identification are mandatory, and group/lot identification is voluntary. Surprise inspections are done for three percent of registered



farms in each Member State. Tagging is required with a conventional ear tag and an electronic identifier (NCBA 2018).

By 1999, all Australian states had implemented on a voluntary basis the National Livestock Identification System (NLIS) using electronic identification (Souza-Monteiro and Caswell 2004). The traceability system became mandatory in all states by 2005 (NCBA 2018). The federal government of Australia coordinates the NLIS, and state governments have enforcement action as part of their jurisdiction and have legal jurisdiction over the health and movement of cattle (NCBA 2018). Meat and Livestock Australia developed the electronic tag system and software to allow easy access to the database (Souza-Monteiro and Caswell 2004). Producer data are exempt and protected from the Australian Freedom of Information statute because Meat and Livestock Australia is a private company (NCBA 2018). Tagging is required by a visible or electronic RFID tag approved by the NLIS. Premise identification, animal identification, and group/lot identification are mandatory (NCBA 2018).

The National Livestock Information System, an animal identification system, was implemented in Uruguay after a foot and mouth outbreak in 2000-2001, and all cattle were required to be registered in 2013 (NCBA 2018). Uruguay is the only country with 100 percent animal identification of its cattle herd. The Ministry of Livestock, Agriculture, and Fisheries (MAGP) administers the program, pays for the ear tags, and all infrastructure related to the traceability program. Premise identification is mandatory for all cattle and individual and group animal identification is mandatory for bovines only. Two tags are required with one being highly visible and the other being RFID technology-enabled (NCBA 2018).

In Canada, Part XV of the Health of Animals Regulations of 1991 was amended to include animal identification in December 2000, taking effect July 2001 (Souza-Monteiro and Caswell 2004). The system became mandatory in 2002 (NCBA 2018). The Canadian Cattle

Identification Agency (CCIA) administers the Canadian Identification System, and the CCIA is governed by a board of directors composed of private cattle trade associations (Souza-Monteiro and Caswell 2004 and NCBA 2018). Section 175 states that every owner of an animal must have an approved tag before being transported from its farm of origin (Souza-Monteiro and Caswell 2004). Section 186 says that the operator of the facility can remove the tags but must contact authorities within 30 days about the deaths of the animals and tag numbers. Identification is required for imported cattle, and Canadian cattle exports must have an approved tag (Souza-Monteiro and Caswell 2004). Individual animal identification is mandatory, and premise identification is voluntary (NCBA 2018). Tagging is required with RFID tags approved by the CCIA (NCBA 2018).

In New Zealand, the National Animal Identification and Tracing (NAIT) began in 2006, legislation passed in 2009, and mandatory individual animal identification was established in 2012 (NCBA 2018). The Ministry of Primary Industries coordinates the program, and the NAIT Limited administers the program. Producer organizations make up the board of directors who govern the NAIT Limited. Premise identification and animal identification are mandatory, and group/lot identification is voluntary. Tagging is required with RFID Birth ID tags approved by the NAIT (NCBA 2018).

Australia, Canada, European Union, New Zealand, and Uruguay all have government-mandated systems and individual animal ID (NCBA 2018). All except Canada have premise ID. Australia and Uruguay have group/lot ID. Data is managed by a private third party in Australia and New Zealand. Canada and New Zealand have an oversight body with industry representation (NCBA 2018).

## **United States History of Traceability Laws and Programs**

The United States beef industry has initiated traceability and sustainability regulations in an attempt to capture the benefits of an effective traceability system and match the efforts of other countries. The Bioterrorism Act of 2002 declares that in the event of a food safety issue or bioterrorism, a firm-by-firm trace-back is mandatory (Adam et al 2016). The problem is that type of traceability system can be extremely slow and assumes good records are kept at each point along the supply chain. The Food Safety Modernization Act of 2011 requires that every step in the food supply chain must maintain electronic records (Adam et al 2016). The law only applies to food regulated by the Food and Drug Administration, and beef is regulated by the USDA (Thatte 2019). The law was made so records could be more easily accessed by the federal government but is only a marginal improvement because it still employs a firm-by-firm trace-back (Adam et al 2016).

Due to the importance of a traceability system, the government created the National Animal Identification System (NAIS) to more effectively respond to animal disease outbreaks. One goal of the NAIS was to respond quickly and effectively against animal health outbreaks that could be damaging to the animal, the public, the economy, or society (Pendell et al 2010). Another goal is to complete current eradication programs by continuing to research disease detection and animal health. Finally, a goal is to increase consumer demand that helps producers by protecting United States export and domestic markets. The NAIS was abandoned in 2010 due to low producer buy-in (Pendell et al 2010). Producers are resistant to mandatory traceability because the benefits and costs are uncertain (Farm Foundation 2004) and concerns about liability.

There are many institutional and structural challenges preventing a traceability system from being implemented on a widespread scale. Farmers and ranchers pay most of the costs of traceability systems while receiving minimal benefits (Crandall et al 2013). Producers receive a relatively small profit but will have to pay the most in a traceability system (Davies 2004). There

is a lack of vertical integration in the beef industry, and cattle pass through several companies along the supply chain (Crandall et al 2013). Producers are concerned about increased liability because it is now possible to trace the source of a disease to a specific producer. RFID technology is expensive for traceability to occur from birth to slaughter. Ground beef is composed of many different animals meaning ground beef is often exempt from traceability requirements (Crandall et al 2013).

These challenges led the cow-calf industry to generally oppose the NAIS program, yet the industry and government still recognized the need to have some system for tracking the interstate transportation of cattle. A mandatory animal identification program requires any animal crossing state lines to be identified using a method that is recognized by the USDA to better handle food disease outbreaks (Schroeder and Tonsor 2012). Crandall et al (2013) states that the Global Food Safety Initiative (GSFI) is an international effort to improve the efficiency of food safety management systems, to ensure consumers that they are getting safe food, and to increase consumer confidence. The GSFI mandates the development and maintenance of systems to guarantee that all goods supplied to a manufacturer are identified; batches in progress, final product, and packaged goods have appropriate records kept. All finished product shipments have records of purchaser and delivery destinations (Crandall et al 2013).

Systems like the GSFI facilitate implementation of traceability projects by United States beef producers. For example, McDonalds teamed up with universities to examine how intensive-grazing techniques can store carbon and create biodiversity in forages and soils (Myers 2019). The GSFI allowed for other traceability measures as well.

The failure of the NAIS did not dampen other organizations' efforts to improve beef traceability. In an effort to reduce the spread of tuberculosis among cattle the State of Minnesota now requires producers to identify all bison and cattle with approved ear tags (Crandall et al

2013). The Minnesota Board of Animal Health wants to have newer identification tags combined with RFID technology to eliminate potential problems of manually keeping records. Most food companies have developed their own traceability systems to rapidly respond when faced with a food recall (Crandall et al 2013).

### **Traceability Impact on International Sales**

The USDA Agricultural Marketing Service (AMS) has created a number of voluntary beef export verification and certification programs (Schroeder and Tonsor 2012). Many major beef export markets require US beef to be imported under a USDA export verification program, which included traceability requirements, but only about 10% of US cattle are enrolled. The volume of US beef production available for export is thus limited by the industry's failure to keep up with other modern country's traceability efforts (Schroeder and Tonsor 2012).

While traceability entails costs, it can pay for itself by stimulating domestic and export demand. Pendell et al (2010) found that a mere 1% increase in domestic demand would generate additional revenues to cover these costs. The United States would only have to maintain a single export market for the system to pay for itself (Pendell et al 2010). Note also that as traceability will likely become a necessary requirement for trade, failure to implement a system will lead to export reductions and losses throughout the beef supply chain.

Other studies conclude differing viewpoints regarding traceability. Resende-Filho and Hurley (2012) define traceability by the precision in the probability of finding the source of a food safety problem. If transactions within a food supply chain are anonymous, then a traceability system is necessary because traceability allows the opportunity for incentive contracts based on contingent payments. If a food supply chain has some characteristics of traceability, then a complete traceability system is not the answer for increased food safety. The precision of traceability should not be used as a synonym for food safety. Firms should always evaluate the

need for additional traceability based on the precision of current traceability systems (Resende-Filho and Hurley 2012). The benefits of enterprise investment activities are limited without industry participation (Fritz and Schiefer 2009).

### **Previous Surveys of Cow-Calf Producers**

Spriggs, Hobbs, and Fearne (2000) conducted a questionnaire of Canadian and United Kingdom (UK) producers on issues of coordination (horizontal and vertical) and quality assurance. Twenty-seven percent of UK producers and 16% of Canadian producers implemented cattle traceability. Twelve percent of UK producers and 3% of Canadian producers joined a producer group. UK producers seem to be more open to implementing traceability and joining producer groups. The European Union was the first country to implement traceability. Thirty-three percent of UK producers and 18% of Canadian producers felt buyer-seller relationships were buyer dominant. Thirty-four percent of UK producers and 53% of Canadian producers felt the relationship was equally beneficial. Canadian producers appear to have more trust in who is buying their cattle than UK producers. The main purpose of quality assurance was to persuade consumers that beef is safe according to 50% of UK producers. Fifty-three percent of Canadian producers felt the main purpose of quality assurance was to help guarantee the highest quality of beef sold (Spriggs, Hobbs, and Fearne 2000). Canadian producers think quality assurance helps increase beef quality, while UK producers think quality assurance helps provide safer beef.

Fearne (1998) collected information surveys and interviews of United Kingdom beef producers, processors, and meat consumers at supermarkets. Over two thirds of the 2,000 cow-calf producers surveyed participated in quality assurance programs (Fearne 1998). Over 50% of producers participated in some direct selling and 32% sold all their cattle through direct selling (Fearne 1998). Sixty-three percent of the beef producers used the auction market in some fashion and 36% sold all their cattle at an auction market. Eleven percent of the producers operated through written contracts or verbal agreements through a co-op or other producer group.

Regarding producers' relationship with customers, 16% of producers said it was a partnership and 33% described the relationship as retailers dominant. Eighty-three percent of the producers viewed buyers and sellers cooperation as vital for the future. Quality assurance programs would restore consumer confidence according to over 50% of the producers, and 40% a quality assurance program would secure a market for their livestock. It is concerning that only 29% of the producers thought a quality assurance program would bring them price premiums (Fearne 1998).

McLeod et al (2018) used a model based off survey data to determine Tennessee cattle producer willingness to participate in a hypothetical Tennessee Branded Beef Program (TBBP). Almost 67% of producers were willing to participate in a TBBP, if profitable. Younger producers, producers who viewed themselves as more inclined to take risks to discover new markets for beef and those more inclined to take risks pertaining to retaining ownership are more likely to participate in a TBBP. Producers who finish feed cattle or retain ownership in feed yards were 16.5% more likely to participate in a TBBP (McLeod et al 2018).

### **Summary**

The severity of the aforementioned animal and food health incidents could be reduced with an effective traceability system to help prevent delays tracing the cause of the incident. A traceability system will provide consumers better information about the food they consume, which creates better accountability upstream in the supply chain and greater consumer confidence in the product. Producers can gear production towards consumer demand

An effective traceability system costs more for producers to implement, but these costs can be offset if consumers are willing to pay more for information on food origin and its supply chain. The aforementioned research conducted on willingness to pay of consumers for certain attributes related to beef traceability, generally found that consumers will pay more for beef that

is traceable. The European Union, Australia, Uruguay, Canada, and New Zealand have adopted nationwide traceability programs while the United States has been reluctant to do so. The United States created the NAIS to more effectively respond to food outbreaks; however, the NAIS was abandoned in 2010 due to low producer buy-in. Producers are concerned about traceability because of costs, liability, and privacy issues. Industry and government still recognized the need to have some system for tracking the interstate transportation of cattle such as creating a new mandatory animal identification program and GSFI. While traceability entails costs, it can pay for itself by stimulating domestic and export demand. Traceability will likely become a necessary requirement for trade, failure to implement a system will lead to export reductions and losses throughout the beef supply chain.



## CHAPTER III

### METHODOLOGY

This study seeks to learn from cow-calf producers who have participated in a pilot traceability system what type of traceability procedures are viewed favorably. The information is acquired from personal interviews conducted over the phone in the summer of 2020. The general format of the interview entailed providing a definition of a ‘traceable beef supply chain’ and then engaging interviewees in a series of open-ended questions, first about their experience in the pilot program, and then their thoughts about beef traceability systems in general. This section first describes the sample and then outlines the interview strategies used.

#### **Sample**

Oklahoma, Texas, and Kansas cow-calf producers who participated in the Integrity Beef Sustainability Pilot project were contacted for a phone interview. The Noble Research Institute provided the contact information. Cow-calf producers were contacted by email or phone call to set up a time for a phone interview, with the recruiting script emphasizing that their individual responses would be kept strictly confidential but that a summary of all interviews would be published. To encourage participation they were offered a \$100 cash payment for granting an interview. The recruiting script and interview procedures were reviewed and approved by Oklahoma State University’s Institutional Review Board (IRB application ID is IRB-20-214-STW). There were 40 cow-calf producers on the list; fifteen of which granted an interview. Interviewee nine and ten represented the same farm, and interviewee fourteen is an employee of

interviewee thirteen, so each interview does not necessarily represent a different ranch. The weakness of the sample is that these individuals may not be representative of the typical cow-calf producer. Individuals volunteering for the project are likely more progressive and attentive farm managers. The strength of the sample is that they have all participated in the same pilot traceability system, and so this study can assess whether that pilot program can serve as a foundation for a large-scale beef traceability system.

### **Defining Traceability**

The design of the interviews included careful consideration how ‘traceability’ is defined. An effective definition would be one that is realistic, reflects the nature of the pilot program, and cues the interviewee to focus on traceability itself and not other issues sometimes confounded with traceability. In a completely traceable beef supply chain, beef can be traced from the farms the cattle are raised until the point of consumption. It is unrealistic to expect every hamburger patty to be traced back to a specific farm, but an effective system would be able to identify a collection of farms from which a patty may have been derived. Explicitly saying this in the definition provides the producer reassurance that the researchers understand the complexities of the beef market. The definition also mentions how information flows up and down the supply chain, and is stated because the Integrity Beef Sustainability Pilot Project concentrated keenly on the exchange of information, and to explicitly acknowledge that the traceability systems we are interested in are those which encourage coordination within the beef supply chain, and is not just a system for identifying problem farms under a disease outbreak.

## Definition of ‘Traceable Beef Supply Chain’

A traceable beef supply chain is one where cattle and its beef can be traced from the farms on which the cattle are raised throughout the beef supply chain until the point of consumption. While a single hamburger patty cannot be traced to the individual cattle from which it is made, it can be traced to a collection of farms. In this system, information (*e.g.*, farm production practices) is passed down the supply chain from producers to meatpackers to retailers, and information (*e.g.*, carcass quality) is passed up the supply chain from meatpackers and retailers back to cattle producers. Such a traceable system might operate through open markets, through vertical integrated, or something in between.

*Figure 2 Definition of traceability given to interviewees at beginning of the interview session.*

Previous attempts at traceability in the US sought mandatory participation, and because this was highly unpopular by cow-calf producers, the definition explicitly states that our definition of traceability includes only voluntary participation. Traceability requires the cooperation between ranchers and beef processors. Ranchers are often hostile to the downstream supply chain segments due to perceived market power issues. Beef processors are sometimes thought to negotiate lower prices by avoiding open markets and seeking live-cattle through captive supplies, vertical integration, and other arrangements. While market power is indeed a potentially important consideration in traceability, we did not want interviewees to automatically imagine a specific marketing structure when thinking about beef traceability in general. Thus, we say in the definition that marketing could occur in a number of different formats, including open markets.

### **Interview Procedures**

The strength of this sample is the subjects’ experience with a pilot-scale traceability program, so the interview was designed to cue them to first discuss their experience in the

program, including what they liked and disliked. Then they are asked to discuss traceability in general. All questions are open-ended, allowing the subject to express themselves in their own words and pursue whatever topic they deem appropriate for the question.

While interviews should by their nature differ somewhat across respondents and be allowed to evolve organically, achieving this study's objectives also requires some consistency in the questions asked. In order to keep the interview focused on the objectives, Figure 3 shows an outline of the questions. Additional questions may be included based on the interviewer's judgment within the interview, but all subjects are asked these thirteen questions.

# Outline of Interview Questions

You recently participated in a Beef Sustainability Pilot Project partially coordinated by the Noble Research Foundation, where cattle from your operation entered a traceable beef supply chain.

**From the standpoint of you, an individual cattle producer ...**

1. What did you like about the pilot project compared to the way you normally market your cattle?
2. What did you not like?
3. How did you feel about sharing information about your operation and cattle with others in the pilot program?
  - What information passed up the supply chain to you did you find useful?What information did you find not useful?
  - What steps were taken to make you feel comfortable sharing information about your operation?
4. If the pilot project were made permanent, would you continue to participate in it?
5. What aspects of the pilot program would you recommend changing?

*General open-ended questions not prompting specific issues*

6. Do you believe the cattle industry will begin adopting traceable beef supply chains on a large scale?

**Suppose the beef industry does adopt a traceable beef supply. We could imagine a successful program that cattle producers like, but we could also imagine a traceability program cattle producers do not like. I would now like to ask you what a successful and unsuccessful program might look like. From the standpoint of the cattle industry as a whole ...**

7. If the beef industry adopted a traceable supply chain on a large scale that was viewed favorably by the cattle industry, what would it look like?
8. If the beef industry adopted a traceable supply chain on a large scale that was not viewed favorably by the cattle industry, what would it look like?

*Open-ended questions that do prompt specific issues*

- Now we arrive at some more specific questions about a traceable beef supply.
9. What information about you and your operation do you feel comfortable sharing with others in a beef traceability system?
  10. Do you believe a traceability system is necessary to manage disease outbreaks like Mad Cow disease or Foot and Mouth Disease?
  11. If the beef industry adopted a traceability system, do you think it should involve the USDA? If so, how?
  12. If the beef industry adopted a traceability system, such that cattle producers felt compelled to participate in order to find buyers, do you think that might alter the market power of cattle producers as compared to the buyers of live cattle? If so, how?
  13. Do you think consumers care if the beef industry adopts a traceability system?

Figure 3. Thirteen Questions Posed to Each Subject

Questions begin with what is familiar to the cow-calf producers interviewed, specifically, their experience in the Integrity Beef Sustainability Pilot Project. Questions then evolve into a

more hypothetical nature, such as the implementation of an industry wide traceability program. The questions in Figure 3 are initially somewhat vague, requiring the subject to reveal what topics are most accessible to their memory, hopefully revealing the traceability concerns of most concern to them. The questions then transition to more specific, often deliberately leading, questions. These latter questions concern issues of value-sharing in the beef supply chain, handling of a food disease outbreak, privacy concerns, and liability issues. To see this flow from specific to general questions, questions 1, 2, 7, and 8 do not mention potential items of controversy such as disease management and market power, but questions 10 and 12 ask about these issues explicitly. This format is chosen so that the interview documents what issues are foremost in the producers' mind. Thus, the questions flow from general to specific to provide the subject freedom to improvise but to also ensure they answer questions pertinent to the study.

The interviews are audio-recorded and are then translated to written transcripts. Interpretation of the interviews are performed by summarizing their responses to the questions, and by documenting themes across questions. An example of a theme is information-sharing. A producer may remark upon the importance of their herd's performance being kept confidential in multiple questions. Another theme may be the importance of obtaining premium prices for their cattle, which also may appear in answers to multiple questions. A theme concerns a subject or topic, one for which different subjects may have express different opinions or discuss from different perspectives. For example, if information-sharing emerges as a theme, one producer may emphasize the importance of confidentiality while another may discuss what types of information are most useful. While these two subjects are not necessarily discussing the exact same topic, both inform the design of how information in a traceability program should be managed.

Questions 3 does ask about information sharing to document in case it was not mentioned in questions 1-2. The pilot project was designed to emphasize sharing information with cow-calf

producers about the performance of their cattle throughout the supply chain. Performance includes death rates and carcass quality. Production practices of the cow-calf producers are reported to beef processors, wholesalers, and retailers. These practices include vaccination records and sustainability practices. Information sharing was the main emphasis compared to other traceability considerations. Not mentioning this information-sharing would suggest a lack of understanding about the project and cause the cow-calf producers to doubt the competence of the interviewer.

Questions 1 through 5 are intended to be a thoughtful discussion of the pilot project. By identifying program attributes the cow-calf producers found desirable and undesirable, the objective of implementing a large-scale traceability program that many cow-calf producers would participate in is met. The interview then will transition to a hypothetical large-scale traceability system. Cow-calf producers will be asked if they believe the industry will adopt traceability. One can imagine a large-scale successful traceability program that cow-calf producers approve of, and one can also imagine a large-scale traceability program that cow-calf producers do not approve of. Cow calf-producers will give their answers to what a favorable and unfavorable traceability system will look like as a way of documenting what attributes of a system would encourage and discourage their participation.

Questions 9 through 13 concern specific considerations inherent in a traceability system. These issues are addressed in the previous literature review. Open ended questions that prompt specific issues will be asked. These specific issues include disease management, market power, and government involvement. The goal is to gather feedback from cow-calf producers on the perceived important issues of beef traceability. At the beginning of the interview, the focus will be on what cow-calf producers mention on their own volition and their experience in the Integrity Beef Sustainability Pilot project. As the interview progresses, we want cow-producers to discuss specific topics known to be paramount in traceability systems.

Although Figure 3 describes the general strategy of the interview, the actual structure of each interview will be different. Interviews will evolve based on the cow-calf producers' demeanor and the answers they give to the initial questions. The interviewee is given the freedom to explore any particular question or topic in greater detail with a particular cow-calf producer, modifying the way a question is asked, and even asking questions not depicted in Figure 3. There are still however, a few rules implemented by the interviewer to ensure the objectives are met.

1. The interview should be focused on the design of a traceability system that is viewed favorably by cow-calf producers. An example of a challenge that is unrelated to this objective is how important timely vaccinations are. The interviewer will be mindful to guide certain remarks to its place in a traceability system.
2. The interviewer should keep the subject focused on a hypothetical large-scale traceability system, once the interview goes beyond question 6. It is acceptable for the interviewee to make statements that provide additional information to questions 1 through 6. The subject is allowed to vacillate between the Integrity Beef Sustainability Pilot project and a hypothetical large-scale program, but it is important that the subject understand that the ultimate goal is to go beyond the project and ponder the necessary features of an effective large-scale traceability system.

It is essential that descriptions of each theme have both a quantitative and qualitative component. It is unlikely that producers will describe any one theme in an identical fashion, so a narrative is needed to describe how these descriptions vary across subjects. Themes will be identified and analyzed by first marking on the transcripts areas where similar comments are made. For example, if Theme A is a hope that traceability might allow them to acquire a higher price commensurate with the perceived quality of their cattle, then the letter 'A' will be written on the written transcripts at every instance such a remark is made. The results will then report the number of those instances and their attributes. For instance, the results might say that ten people



spoke of the theme that two spoke of it with confidence while the other eight merely mentioned it as a possibility. Two of the ten thought that while they might receive higher prices the possibility of receiving a lower price was also real.

Results will be provided in terms of themes, where the theme itself comprises the section heading and paraphrased statements made regarding that theme in the narrative. The conclusions section will then attempt to judge what those statements imply about building a traceability system favorable to cow-calf producers. Each interviewee is given an anonymous identification number and the transcript of their interviews (redacted to prevent identification) is provided in the appendix.

## CHAPTER IV

### RESULTS

#### **Introduction to Results**

The purpose of the interviews is to better understand the mindset of cow-calf producers to know what type of traceability system will appeal to them. Themes are common topics regarding traceability that either encourages or discourages cow-calf producers from participating in a traceability system. Examples of themes are information sharing and the role of the USDA.

The purpose of the interviews is to document aspects of the pilot project producers liked, did not like, and explore ideas on how a large-scale traceability program meeting their approval should be conducted. The sample included individuals with actual experience in a traceability system where both money and information are passed up and down the supply chain. The questions posed focused on (1) their evaluation of the pilot project and (2) their thoughts on how an industry-wide traceability system should be implemented. Analysis of the interview content mostly concerned the frequency and nature in which various themes arise in subject responses. Themes are analyzed in a quantitative and qualitative fashion. Quantitative in the sense that the number of times the theme is expressed and reported, and qualitative in that the nature of the theme requires a narrative explanation.

It is important to understand how the interviewee comments are reported in the sections below. Each section describes a particular theme. A paragraph in italics is given at the beginning of most sections providing a summary of comments about that theme. Sections that do not have italicized paragraphs are short in length, so there is not a need for a summary.

The narrative associated with each section is a paraphrased description of actual comments made by interviewees. The comments are paraphrased rather than reported verbatim to make them more succinct and clear to the reader. Because comments from different subjects are grouped together under a similar theme adjacent sentences can sometimes sound contradictory, and the narrative will not necessarily have a natural flow. Due to this writing strategy the sentences often sound like they are written in the first-person but they are all statements made by the producers. At no point in this section do the researchers attempt to synthesize or judge their comments. For example, a hypothetical sentence saying, “A single traceability system will not work, you need multiple systems to choose from” should be interpreted as a single interviewee offering their opinion on single versus multiple systems, not the researchers’ summary of all interviewees or the researchers’ judgement. The identification number of the interviewee making the response is provided at the end of the statement, and recall a redacted copy of their transcript is provided in the appendix.

Considerable judgement had to be made in determining how to paraphrase comments. Sometimes the verbiage used is altered to aid readers unfamiliar with cattle production, such as replacing “shots” with “injections”. Other times verbiage is left unchanged to ensure the interviewee’s emotions are being properly expressed. For instance, one producer described providing information to the federal government as making them “puke a little bit”, and this exact phrasing was preserved to ensure the true emotion is communicated.

The pronouns he/his will be used throughout the section. The researchers are doing so regardless of gender. A single gender is used to prevent identification of the subjects. This way the researchers can better separate the subject from the ‘other’ (often consumers) the interviewees refer to.

### **Information Sharing**

*The sharing of information both horizontally and vertically within the supply chain was generally considered the major contribution of traceability. Horizontal sharing allowed each cow-calf producer to evaluate their cattle’s performance relative to others in the pilot program and identify areas of potential improvement. Vertical sharing gave them the opportunity to compare cattle performance downstream the supply chain, and if one producer’s cattle experienced greater health problems it suggests they can be more proactive at the cow-calf level and increase value downstream. Moreover, the ability to receive carcass quality information allows them to evaluate the value of the end-product to the consumer. However, the value of this information varied across producers and depended on how they traditionally market their cattle, as some producers already receive much of this information as part of their normal operations. As such, the pilot program serves to help elevate all participating producers to the level of the most sophisticated producers.*

Information gives producers the opportunity to observe aspects of their operation that need improvement. Interviewee eleven (hereafter, I11) had a set of cattle for which the feed yard did extra pulls. (Pulling cattle means removing cattle from the pen for health treatment or further observation). Receiving this information allowed them to change the timing of their vaccination program (I11). By sharing information about vaccines, cattle can be healthier in the feed yard (interviewee two (hereafter, I2)).

Cow-calf producers analyze information such as carcass quality to compare to other cow-calf producers. Carcass quality refers to carcass desirability relative to quantity of components (muscle, fat, and bone), USDA quality grade, and eating qualities. Interviewee one (hereafter, I1) remarked on receiving information about gain, morbidity, mortality, and grading. Interviewee two (hereafter, I2) has finished his cattle (fattening cattle on a concentrated ration to get ready for the packer) for several years on his own and so is accustomed to receiving this information. While he did not receive any new information, the ability to compare information such as the cost of production, profitability, animal welfare, carcass quality, and breeding program was useful. He remarked that cow-calf producers need to observe the difference in profit between breeding with a set of calves that has been bred to a carcass bull versus a set of calves that has been bred to a lower carcass bull or cheaper bull (I2). (Carcass bull meaning a bull produced based off genetics and having quality carcass grades using carcass EPD). Interviewee three (hereafter, I3) remarked that information such as gains and death loss was useful to better understand how his cattle fared at the feedlot and beef packer confirming he was producing a quality product, allowing for education, and how to improve their operation. I5 observed carcass quality and grade to compare their cattle to other cattle going through the feedlot at a similar time. The greatest advantage of the Integrity Beef program, commercial traceability, mandated traceability, or other nonprofit organization is the power in the knowledge that is most beneficial to any cattle operation including carcass merits, morbidity, and mortality (I9). Traceability and Integrity Beef require record keeping, and record keeping equates to knowledge to the producer and that knowledge can be translated into power. Power meaning utilizing the knowledge gleaned from the record keeping to leverage it as power in decision making (I9). I15 was pleased to have a market for providing high quality cattle with the expectation of receiving a higher price. Traceability allows producers to monitor the policy and yield grade of their operation, creating an opportunity to get a return for his operational practices such as the Integrity Beef price alliance at NRI (I11). I12 used carcass quality information to make genetic decisions, enabling him to move progressively

forward. I13 gives credit to Integrity Beef for the evolution of their ranch, such as paying more attention to the bull genetics and using artificial insemination. The marketing information allowed producers to acquire their Prime to Choice ratio (number carcasses grading Prime divided by the number grading Choice), how many died, how the cattle performed, and the cost of gain. The pilot project allowed cow-calf producers to observe what you measure, how you measure, and consult with a professional about the meaning (I13). Interviewee six (hereafter, I6) also valued information on their Prime-to-Choice ratio, and the information helped them improve their carcass yield rate now to 85% from 62%. Yield rate estimates the percent retail yield of the rib, round, loin, and chuck. The information is beneficial when listened to (I4). Reports were given on the quality of their animals and the ranch cattle was raised on to allow cow-calf producers a chance to receive information back and compare their operation to other cow-calf producers.

NRI played an instrumental role in guiding the cow-calf producers through the Integrity Beef Sustainability Pilot project. NRI guided them through the program and did not make it any less impactful (I4). Cow-calf producers receive a report card showing what other cow-calf producers are doing better (I4 and I15). According to I4, NRI provided cow-calf producers the following information:

- how their carcass information compared to other cow-calf producers
- expected premiums for their traceable beef
- negotiations with the feedlot operations at the ranch
- advice on everything on the ranch such as soil, pasture, grasses, weed, and everything having to indirectly do with cattle production
- vaccination program

One cow-calf producer did not find all the information useful. I6 did not find information about other ranches useful, such as what they supplement in minerals or in grain, travel, and

transportation expense. He was mainly interested in carcass data because that is difficult to get (I6).

### **Issues with the Information**

*Cow-calf producers need to be able to compare information with similar operations. In the pilot project, cow-calf producers were left with comparisons that were not always reliable. A bona-fide third party such as IMI Global needs to be in charge of a common database that all members of the beef supply chain could upload data and fix data issues. The sample size of the project needed to be larger and over a longer period of time to clarify if something is a single farm issue or a systematic issue. The data cow-calf producers received was difficult to interpret and needed to clarify the following questions. How did the cattle exactly grade? What was the ribeye measurements? The data were difficult to use and interpret because cow-calf producers did not always interpret specific data items the same such as labor, vet supplies, and medical expenses. Accountability is needed to ensure cow-calf producers provide the same data. Some cow-calf producers would provide specific data, but others would only supply part of it. There needs to be a better form of grading the steps along the beef supply chain. Cow-calf producers did not receive information until after the meat was processed. The reports are dependent on the actions of other members of the beef supply chain, but the blame seemed to be on the cow-calf producer. The greatest challenge for any traceability program is that it cannot be expected for a cow-calf producer to be able to react quickly. A client needs to be established that buys the beef because of the quality perceived from the research and traceability.*

The information needed to be clearer so that cow-calf producers can compare information with similar operations. Producers struggled to compare themselves with other producers because of operational differences in health, grade, and percentage of gain (I1). This can be accomplished by establishing a common database for reporting everything online, allowing feedlots, packers, and those involved in beef production to upload the information to the same place and draw the

information from there with a third party, university, or NRI in charge of the database. NRI has been in negotiations with cattle tags companies to allow for a common database (I1). I9 and I10 have 135 cows. They are interested in comparing sales records of operations similar to theirs especially performance of their cows (I9 and I10).

The information was difficult to interpret (I12). He had expectations of determining the exact grade and ribeye measurements of his cattle with tangible and specific information. For example, cow-calf producers were grouped into tier one, tier two, or tier three. They were not told if it is good to be in tier one or tier three. Cow-calf producers received something similar to “Wal-Mart liked it” and liking is a flimsy word. NRI never contacted them to explain the information further. The data were convoluted as how to interpret it (I12). The information needed to be deeper and wider to provide back enough information to clarify if a single farm issue or a systematic issue (I9). The data set needed to be larger and over a much longer period of time to dilute the percentages given back to the cow-calf producers (I9). Dirty data occur when one producer provides specific data, but other members only supply part of it (I10). An oversight committee is needed to hold cow-calf producers accountable and ensure comparisons are reliable. Integrity Beef has limited manpower, and NRI has limited commitment to be able to supply manpower. The use of a bona fide third-party such as IMI Global could help solve the issue, and Integrity Beef has discussed utilizing a third-party (I9). A third party that is outside the politics would understand the rules, what data needs to be collected, how it needs to be stated, and break down/ police (I9).

The information cow-calf producers get back is dependent on the actions of other members of the beef supply chain. The beef supply chain involves many stages between the ranch and the processor (I15). The reports are dependent on the actions of other people once the cattle leave the ranch; however, the call to action seemed to be on the producer. For example, the cow-calf producer was told they had too high of death loss at the feed yard for cattle that died ninety



days after arrival at the feed yard. The beef industry tries to tell the cow-calf producer that their cattle did not perform well months after they left the ranch. He wants to be held accountable and graded on what he has control of. There needs to be a better form of grading the steps along the beef supply chain and feedback given at the feed yard. The following questions need to be answered at the feed yard. When they get to the feed yards, are these highly taken care of premium cattle? Did they come off the truck and go right in the pens with all the other cattle? It would be beneficial for the feed yard to report the day they received the cattle. They did not get feedback until after everything was processed and the meat was already slaughtered months later (I15).

Cow-calf producers need to receive useful information in a timely manner. Some producers (I5 and I8) would have preferred receiving the information back quicker. The information was not in a usable format because they had changed bulls by the time they got information back about the quality of the calves (I8). The biggest challenge for any cow-calf producer is to change operation practices quickly because it is at least six months before cow-calf producers get results back (I9). For example, they sell a steer into the pilot program, and a calf is slaughtered six months or a year after, and cow-calf producers then receive carcass data, mortality, and morbidity information. It takes years for cow-calf producers to alter their production practices, and producers cannot be expected to react quickly (I9).

One subject (I6) noted that the data were difficult to use and interpret because producers did not always interpret specific data items the same. The fact that some expressed labor cost as \$0 dollars per hour and others provided a cost of \$30 per hour indicates that some producers did not consider their own labor a cost. At the beginning of the project, producers used different definitions for various expenses like veterinary supplies. The problem was noticed by many producers as well as NRI, and an ongoing effort was begun to standardize the definition of all terms and units used in data entry (I6).

Some cow-calf producers are concerned that buyers do not understand the value of traceability. Cattle needs to be bought directly off the ranch to know exactly when the cattle are sold (I8). Participants were only told that the first year. A client needs to be established that buys the beef because of the quality perceived from the research and traceability (I8). I13 markets his cattle through Superior (an online auction). When cattle reach that stage, there is no interest in Integrity Beef cattle or raised on a NRI program; there is only concern about the death rate of the cattle (I13).

Cow-calf producers addressed other issues. I11 wanted feedback from the consumer on the quality of their beef. One cow-calf producer had questions about when traceability begins. Electronic identification tags need to be put on when the calf hits the ground to begin traceability at that point (I3). I3 usually puts E.I.D. tags in when administering the first set of vaccinations or at weaning when administering the second set of vaccinations.

### **Cow-Calf Producers Willingness to Share Information**

*In order to receive information back, cow-calf producers have to be willing to share information with other cow-calf producers. Some cow-calf producers feel completely comfortable sharing information because NRI provided credibility. Cow-calf producers need to receive the information from packers and feedlots because concerned packers and feedlots will use the information for only their advantage. They could pay cow-calf producers less who are substandard in certain metrics. Some cow-calf producers need restrictions on information sharing to be comfortable. One cow-calf producer does not want to be constantly contacted by vet suppliers and vendors who have access to his information. Another cow-calf producer does not want animal rights activists coming to their ranch to cause trouble, so they are only comfortable sharing location information only after the cattle are sold. Cow-calf producers do not want to provide financial information such as stock investments, C.D.s, and retirement accounts or intrusive personal information (something that some producers interpreted the request for farm*

*net worth statement as such). Financially the two relevant information pieces is the size of the calf and price per pound. Legal concerns can occur because privilege is not going to be valid if an entity receives a subpoena to release the information.*

Cow-calf producers have to be willing to share information to have an effective traceability system. I3 is comfortable with anybody coming to observe their operation and sharing location of their cattle, what breed of bulls they use, what their Expected Progeny Differences (EPDs) are, and DNA. EPDs provide estimates of the genetic value of an animal as a parent. His main concern about sharing information is the packers and feedlots do not give back the information or decrease their price offered to ranchers who do not share information about cattle genetics. I3 found the information the pilot project sent back satisfactory that addressed the following:

- the number of times the calves were doctored
- the feedlots treatment plans when first receive the cattle
- the number of times the cattle had to be treated for a disease
- the number of second time vaccinations given at the feedlots
- the weight they left the feedlots going to the packers
- average daily gain and conversion factors at the feedlots
- performance on the rail from the packers
- percentage they dressed out at
- how they are selling

I3 is concerned the packers and feedlots would use the information for only their advantage. I4 found favorable the concept of sharing information and is not afraid to do it. NRI provided the credibility, and they had no hesitation about sharing information. I4 has done work with NRI affiliates, their oil and gas company, and was impressed with NRI's agricultural research (I4). I7

is comfortable sharing all information the leaders of a traceability system determine is worth sharing. Interviewee eight (hereafter, I8) is comfortable sharing any information because producing a quality animal requires following top notch health protocol. I11 has no objection to sharing information because he is not going to do anything wrong on purpose. He is proud of what he does and wants to produce the best product that is available and welcomes visitors to the ranch (I11). I12 is glad to provide the information and is willing to share all information. People are welcome to the ranch to observe the gentleness of his cattle, their appearance, and how they are handled (I12). Interviewee fourteen (hereafter, I14) is comfortable sharing just about any information including genetics, time frame of the calving, marketing, BQA certified, medication, and withdrawal day.

I5 produced cattle for a college, and the college was glad to share the information. As an individual producer, I5 is comfortable sharing information as long as it is anonymous. Some cow-calf producers need restrictions to be comfortable sharing the information. I1 is very much for sharing information including purchase of the cattle, herd protocol, calving records, sale records, and feed records, especially if anonymous. They are comfortable sharing input cost because their program can be adjusted if something is wrong with their health protocol and cattle selection. They are not too favorable of sharing tax information. I1 prefers the database be limited to who can access the information to avoid vet suppliers and vendors contacting them. I2 appreciated the fact that the information in the pilot project was mostly anonymous because cow-calf producers can be competitive and private with information. There are pros and cons to using a name. Their ranch was targeted in a brochure where their cattle looked impressive in the comparison, suggesting the other operation in the brochure had lots of room for improvement (I2).

Many cow-calf producers are comfortable sharing only certain information. Once the cattle are sold, I2 is comfortable giving the location information. They are not comfortable sharing information about cattle location on their ranch due to concerns about animal rights

activists coming to their ranch to cause trouble. Sharing of information is based off who owns the data and how the data is protected. They are willing to answer questions about how the handling of their cattle and the trainings they go through. Everyone on their ranch is BQA certified because BQA provides detailed descriptions of operational procedures on the ranch (I2). I5 thinks most cow-calf producers would be comfortable with the numbers if it was mandatory to put in the E.I.D. tags. Most cow-calf producers would be opposed to the use of names on all the information (I5). Some cow-calf producers are concerned about sharing certain financial information. Integrity Beef at one point asked cow-calf producers to provide retirement accounts, C.D.s, and stock investments, but criticisms from cow-calf producers led to Integrity Beef disregarding that idea (I6). (This was never asked for producers to provide. Although some producers interpreted Integrity Beef's request for a farm net worth statement as such.) They have no problem providing information related to the expenses and income related to raising cattle (I6). I15 is comfortable sharing information as long as it is not intrusive personal information that is not related to traceability such as how much their overall operation was worth and other financial information. Advice on improving your overall ranching operation needs to be a separate consultation than the sustainability and traceability program (I5). I9 is comfortable sharing records and data as long as it is anonymous and the financial aspects of the records they submit are limited. They do not want to show their accounting ledger for free rein to be insinuated and criticized without any limits. I9 thinks financially the two relevant pieces of information is size of the calf and price per pound. I10 is not completely comfortable sharing price per pound.

Privilege is not going to be valid if an entity receives a subpoena to release the information (I6). The IRS audited their ranch for four or five trips to observe if it was truly a working ranch because they suspected it was a hobby. They have 350 cattle, and he works after his day job until dark which is five to seven hours. The IRS totally irritated them and caused a lot of mistrust because anyone that visits their ranch can see it is not a hobby. NRI is going to hand

over information if the government needs information from the cow-calf producers so he does not blame NRI. The IRS agent that observed the place wanted to see six Angus bulls. He had a difficult time explaining to the IRS agent that is not a bull, look underneath it. I6 had to tell the agent to look for hangy downs (bull's private parts) which is what his kids call them.

### **Steps Taken to Make Cow-Calf Producers Comfortable Sharing Information**

NRI and Integrity Beef took steps to ensure cow-calf producers who participated in the pilot project felt more comfortable sharing information. I1, I2, I12, and I15 said the information would be anonymous. I15 does not want to disclose the price received for his cattle. He is giving information for NRI to provide a report card and compare to other participants. I15 says do not publish the information with names. I2 was impressed with the NRI project manager because the handling of the data, communications with him, and presenting what NRI was going to do was well-handled and professional. Any information that was shared NRI asked in advance and he approved it. I2 had contact with NRI and the feed yard to ensure confidence that his data would be protected. Integrity Beef members would discuss what information was appropriate and acceptable and address the following questions (I9). What records are appropriate? What records are everyone comfortable sharing? What records with data that they are collecting is powerful? The members would agree by a consensus what would be used (I9). NRI provided assurances that the information would not be shared with the Internal Revenue Service, but if NRI got a subpoena for the records then they would release them (I6). NRI told the cattle producers what was to be expected (I7). Not all cattle producers felt steps were taken such as I8 who did not remember any steps to make him feel comfortable sharing information.

## **Will Cow-Calf Producers Continue to Participate in the Integrity Beef Sustainability Pilot Project?**

*Cow-calf producers had varied responses regarding whether they would continue to participate in the pilot project. Most cow-calf producers would continue to participate. Many cow-calf producers need to be compensated for the effort and costs traceability entails. Some cow-calf producers had doubts about continuing to participate.*

Cow-calf producers had varied responses if they would continue to participate in the pilot project. Most producers would continue to participate (I1, I3, I7, I9, I10, I11, and I13). The project did not have any additional costs, and he received new information (I3). Buyers can observe the process that cow-calf producers undergo to get cattle ready to sell allowing producers to charge a premium to buy cattle directly off the ranch (I7). The marketing information was beneficial to see if it improved on some of his statistics (I13).

Many cow-calf producers want to be compensated for the effort and costs traceability entails. I2 said participation would be dependent on the value received. The data's value is not especially high for the producer, making it necessary to receive a premium early on (I2). I5 would continue to participate in the pilot project because it paid extra money. If did not pay extra money, they would try to participate on a limited basis. Producers need to be compensated for the extra work (I5 and I15). I15 would consider participating if received a premium otherwise, he could sell them at the sale barn for the same price requiring less effort. The premium for the pilot project was only for the first two years (I15).

Some cow-calf producers had doubts about continuing to participate. I6 would continue to participate, but he would have to control his wife's anger. There are significant changes that need to be made that are described in the next section (I6). I8 probably would not participate because he saw no benefit. I12 would not participate the way the project is currently

administered. He wants to, but the information needs to come back in a tangible, understandable way to move progressively forward (I12).

### **Issues with the Integrity Beef Sustainability Pilot Project**

*Some cow-calf producers say they were taken advantage of because they did not receive the bonus intended for them. Cow-calf producers were paid extra for selling through private treaty off the ranch instead of at the sale barn. The bidder of the cattle underbid all the cattle knowing cow-calf producers were receiving a bonus for participating. The bonus that was supposed to go to the cow-calf producer really went to the middleman. Beef labeled Integrity Beef has to follow certain protocols such as being weaned for 75 days. (Integrity Beef cattle only have to be weaned for a minimum of 60 days before leaving the ranch. A producer was mistaken about Integrity Beef protocols.) A well-connected person at the NRI sold hundreds of animals that got paid the project money, but the animals did not qualify because had been weaned 60 days in questionable shot protocol. The buyer of the cattle did not act interested in the records cow-calf producers kept, thus the records may not have been accurately given to the feedlot and the packer. A cow-calf producer who did not participate in the pilot project sells directly to the feed lot and their records go with the driver. Cow-calf producers did not receive a better price by having an additional venue to sell his cattle. Cow-calf producers need to know exactly when the cattle are sold and receive feedback from consumers. One cow-calf producer joined another traceability program in Angus Link. The Integrity Beef program forced one cow-calf producer to change their preferred way of operating.*

There are significant changes that need to be made in the pilot project. The cow-calf producers were taken advantage of because they did not receive the bonus intended for them. Cow-calf producers were given a bonus for selling private treaty off the ranch instead of the sale in Oklahoma City. The buyer that came out to bid on the cattle underbid all the cattle by bidding less than the Chicago Mercantile Exchange (CME) on all the cattle. He knew the cow-calf



producers would receive a bonus for participating in the pilot project and took this into account when placing his bid. The following numbers are hypothetical. He bid \$800 for each animal, and the producer would get another \$50 from the pilot project. The cattle were really worth \$840 thus the producer would get \$10 more than what they were worth. The cow-calf producers were supposed to inform two NRI employees of the bid, and they informed the producers that the cattle were underbid by a significant amount. The bonus that was supposed to go to the cow-calf producers really went to the middleman who bought them cheap and sold them for what they were really worth (I6). I11 felt the buyer the first year of the pilot project discounted the cattle slightly knowing the cow-calf producers received a premium. There was a bigger discount than usual to account for transportation, yardage (accounts for the non-feed cost per head of cattle managed in a feedlot), and shrink (weight loss) when buying directly off the ranch, but the second year I11 was pleased with the offer.

The program requirements did not seem to apply to everyone. A well-connected person at NRI sold hundreds of animals that received the pilot project money, even though their animals did not qualify (I6). Integrity Beef cattle have to follow certain protocols such as a 75 day weaning period. (Integrity Beef cattle only have to be weaned for a minimum of 60 days before leaving the ranch. I6 misunderstood Integrity Beef protocols.) This person at NRI had hundreds of head of cattle that had been weaned 60 days and followed a vaccination program that may not be consistent with Integrity Beef. The person was able to work his way into the system and receive a premium that was intended for those who follow the Integrity Beef protocols. I6 had calves that had escaped for a few days and went back to their mother. He did not sell them as Integrity Beef animals because they were not weaned for 75 days. He sold calves at a sale barn because the bulls were not in the top 20 percent for weaning weight or did not meet other Integrity Beef requirements. An employee at NRI told another producer that he could not sell under the name Integrity Beef because an accident forced the producer to wean for only 70 days.

The cow-calf producers that play by the rules are offended when other cow-calf producers receive special treatment (I6).

The records may not have been accurately given to the feedlot and the packer. I15 thinks the records did not go to the packer or the feedlot because the buyer of the cattle for the pilot project did not act remotely interested in the information. It is possible NRI provided that information and attested to the fact that the cow-calf producers adhered to the guidelines. The feed yard should want to prove they are getting quality cattle, otherwise they would purchase sale barn cattle. The feed yard would not know certain information such as the timing of shots (e.g., vaccinations, health treatments) or if the animal even received shots. He knows another cow-calf producer who sells directly to the feed yard and the records go with the driver (I15).

There were other issues in the pilot project that need to be addressed. I1 prefers a way to report everything online ensuring cattle records integrate to automatically flow up the supply chain (I1). I5 was not sure the feed yard or packer found the information beneficial. I6 did not receive a better price by having an additional venue to sell his cattle, such as another buyer to place bids. I7 mentioned the difficulty of taking cattle off the ranch to weigh them and the risk of injury whenever cattle are loaded onto a trailer. It would have been good if their ranch was set up where he could weigh them, load them on a truck, and transport them (I7). I8 wants to have his cattle bought directly into the program which occurred one year to know for sure when the cattle are sold. Unless bought directly from I8, there is no point in sharing any information. I11 wants feedback from those consuming the product.

One cow-calf producer found a better traceability program than the Integrity Beef Sustainability Pilot project. I12 started participating in Angus Link for the following reasons. Cattle are tracked by an Angus Link number which come off of what kind of cattle. They do a population number based off of what bulls you use. E.I.D. tags are put in the cattle after they are

sold. The cattle are traced and carcass merits goes to the American Angus Association and put into a database, and the information comes back to the producer. Producers receive information such as the sale in which the cattle are harvested, time of purchasing, and if applicable, cause of death. Those were his expectations for the pilot project and why he went with Angus Link (I12).

The Integrity Beef program forced one cow-calf producer to change their preferred way of operating. The Integrity Beef program does not match their view of ranching because they prefer not to background their calves with feed and selling them in December (I13). (Backgrounding is when cow-calf producers do not sell their calves at weaning, but manage them on the farm for some period of time before selling). They had to change from a spring calving program to a fall calving program. They do not feed grain products on their ranch; they instead feed high energy rations and native grasses (I13).

#### **Are Cow-Calf Producers Open to a Large-Scale Traceability Program?**

*Cow-calf producers tend to be independent; however, an emerging number of cow-calf producers are open to sharing the information that a traceability system entails. A traceability system takes extra time, effort, and cost; thus cow-calf producers want to get paid a premium for data collection. Producers are more likely to look favorably on a large-scale traceability system if the costs are low and/or the premiums are high, and if the system is voluntary. Most members of the beef supply chain want traceability, but consumers are probably going to have to pay more for it. If a voluntary system, the consumer will pay more. If a mandatory system, the government will pay for it. One cow-calf producers thinks there needs to be only one traceability system. Another believes traceability needs to be done through a variety of programs ensuring cow-calf producers have a choice of which program to participate in and in what capacity. Some programs would be purely commercial and profit. Others would involve a non-government organization and incorporate research aspects.*

A large group of cow-calf producers are going to be too independent to implement a traceability system; however, a growing number of cow-calf producers do not mind sharing the information that a traceability system entails. I1 is uncertain if traceability on a large scale will ever be implemented because of the independence of cow-calf producers, but he does see COOL (country of origin labeling) gaining traction. There is a growing number of cow-calf producers including I1 who would really like to have information regarding health and grade. The nice thing about Integrity Beef is cow-calf producers are paid a premium to participate in the pilot project. A tangible benefit is needed to incentivize cow-calf producers to participate in a traceability program allowing producers to be compensated for the cost and effort to put an electronic ear tag in, birthdate range of calves, and genetic information. There can only be one kind of program (I1). I3 does not believe large scale traceability will happen for a long time. The record keeping would be burdensome for cow-calf producers. The pilot project cannot be done on a large scale because not everyone will keep records (I15). Cow-calf producers have to be paid, and a new generation of ranchers is the only way to get traceability on a large scale (I3). A large number of cow-calf producers are old, stuck in their ways, and do not want to change; however, some cow-calf producers will gradually change if shown the benefit (I3). I4 knows a lot of ranch workers with the mindset of they have done this forever and they know how to do this and nobody is going to tell them how to do this. He is befuddled by that attitude and thinks it is insane. The workers do not appreciate the aspects of a traceability system because not as close to the finances. It is amazing when you make the most of help from NRI (I4). Ranchers are very independent people who like doing things their way and do not want anybody else telling them what to do, but there is a subset of ranchers who are progressive (I12). His uncle's grandson runs a ranch, and he vaccinates cattle when he wants to and some years he does not. There will never be a hundred percent cooperation from everybody no matter what you do (I12).

There is a growing interest in traceability from cow-calf producers, consumers, packers, and feedlots. I5 sees beef traceability being implemented on a large scale as being at a crossroads as whether the consumer will pay more for a traceable product or if the government will pay. Cow-calf producers and consumers would love to have traceability all the way down to the steak level, but it is uncertain if consumers are willing to pay more for it. The cost and whether it is mandated or not are the two biggest issues. Implementations of a large-scale beef traceability system faces a number of obstacles. Cow-calf producers tend to be very independent, and the cattle industry is lightly regulated by the government. Many cattle are sold at sale barns through auctions where no traceability takes place and nothing is reported to the government, thus the current system lends itself to not being highly traceable (I5). I10 believes there is a willingness for cow-calf producers to create information to distinguish their product. Cow-calf producers have to lose some of their independence and make a choice. Are cow-calf producers going to continue to participate in a declining market because they want to be independent, or are cow-calf producers willing to take a risk and share data and protocols in a blinded way in order to market their product elsewhere? I10 believes cow-calf producers are too independent to make the change towards traceability, but he does think a growing number will adopt sharing data through a traceability system. Cow-calf producers are typically second-job opportunities where a person has a primary job and has a ranch to make marginal profits. They will have enough insight to increase profit that a growing number will adopt sharing data through a traceability system. Beef labeled traceable that meets certain criteria would have a competitive advantage over cow-calf producers who do not which would be personally great for I10. I10 supports opening up their beef to the international market through traceability. Cow-calf producers are prima donnas compared to row crop farmers and want to remain independent (I9 and I10). A way for producers to sell their beef through international markets is being more like row crop farmers and joining cooperatives. (Cooperatives or coops are business organizations where independent producers voluntarily

behave as if a single business). I9 is comfortable joining a cooperative as long as they retain their private on-farm assets. I12 says farmers will do coops, but ranchers will not.

I2 sees traceability on a large scale happening slowly and accomplished through a variety of programs allowing cow-calf producers to choose which program they participate in and what level. A branded beef program that directly benefits each individual producer is the best way. Some traceability programs will be purely commercial and profit while other traceability programs would involve a non-government organization such as NRI to incorporate the research aspect. Cow-calf producers would be willing to receive less of a premium to be provided with the research aspect. If they get paid for the information, some cow-calf producers will be comfortable answering every single question about their cattle and operation. Some cow-calf producers will never participate in the program no matter what the program pays. The majority of cow-calf producers are somewhere in between. If cow-calf producers can see a profit, more and more will be willing to answer questions (I2).

### **Voluntary or Mandatory Traceability Program**

Cow-calf producers differ on whether a traceability system should be voluntary or mandated by government. Does government have the right to force cow-calf producers to implement a traceability program? A substantial number of cow-calf producers will not find that favorable. I1 sees large-scale traceability being implemented on a voluntary basis because a mandatory system would not be viewed favorably by cow-calf producers (I1). One cow-calf producer believes some parts should be mandatory and some should be voluntary. A disease traceability program needs to be mandatory (I2). When establishing an effective disease prevention/traceability program, a marketing program can be established using the same ear tags and technology. The cow-calf producer should have the choice to answer the questions in order to join a marketing program. A key to a voluntary system is allowing cow-calf producers to make more money. Voluntary means it would be market driven, and I2 would have to benefit

financially or data wise. A mandate from government with government paying part of the costs is ultimately going to get a large-scale traceability system (I5). I12 thinks traceability needs to be mandatory. I10 does not think the United States will adopt traceability as a requirement so it will be secondary if cow-calf producers decide to participate or not.

### **Cow-Calf Producers Concerns about a Traceability Program**

*Record keeping clarifies who produces superior and inferior cattle, making cow-calf producers concerned about punishment for their actions. A traceability system needs to entail a way for cow-calf producers to not be severely punished for their product. Feedlots could lower their price if a cow-calf producer's data are not comparable to other cow-calf producers. How far back down the beef supply chain will liability go? Answering that question is important. Cow-calf producers might not have any control of the animal for months when an incident occurs. The way the beef industry is run currently, it is impossible to trace an incident to a specific ranch. Cow-calf producers do not support a traceability system where the risks and requirements are so burdensome they do not want to be in the beef industry. They do not want to go to prison because one of their cows infects other cattle with a disease. Consumers could not purchase beef from a certain ranch because they had a negative experience. Cow-calf producers are concerned that the premium a traceability system creates would be received by other members of the beef supply chain but not them. The premium needs to be throughout the beef supply chain. The high cost of implementing a traceability system and giving information to federal authorities are concerns. Labor intensive, job intensive, and no usable information back to the cow-calf producer are problem areas.*

The main concern of cow-calf producers is being punished for their actions because more information clarifies the cow-calf producers who do not produce quality cattle. A concern of I1 is feed yards will use the information to decrease the price cow-calf producers receive because their information does not compare well. If this occurs, cow-calf producers would not want to invest in

producing better quality for the feedlot; they want to be anonymous and feedlots not know information such as genetics. There are two primary reasons why a traceability system has not been implemented yet in the United States. It is new and cow-calf producers want to retain their independence and have more of a conspiracy mindset. Cow-calf producers do not want the beef industry and consumers to know diseased cattle came from their ranch because a cow that tests positive for mad cow disease will force the cow-calf producer to liquidate his herd (I1). Liability is a concern because how far down the supply chain will members be held accountable (I2). A lawsuit could occur against cow-calf producers when the producer has not had control of the animal for several months. The current structure of the beef industry makes it impossible to trace a pen of cattle and determine an event happened at a specific location. If a pen of one hundred head is bought at the sale barn it might come from 57 different farms. A fear of cow-calf producers is a situation being misconstrued and becoming a lawsuit, and avoiding lawsuit situations is the key to implementing mandatory traceability (I2). I9 would not support a traceability system where the risks and the requirements are so burdensome that they decide to leave the beef industry. The only avenue that beef can be produced is at an industrial level, require OSHA inspections, and have industrial insurance. The consequences of a violation are so severe that the beef industry turns into the swine and broiler industry (contract farming and vertical integration). The small cow-calf producers would be put out of business because they do not have the manpower, financial assets, or risk management tools that larger companies have. For example, suppose they follow all the rules of the traceability program and one of their cows get mad cow disease, infecting several others: could the rancher be put in prison?. The only entity in the United States that could handle that risk management is at an industrial level. A traceability system needs to mitigate the fear of the FBI coming because they did not use BQA injection sites on the neck and a lesion is in the meat. (BQA is Beef Quality Assurance, a program aimed at improving beef management practices, including how injections are administered). I9, despite all those concerns, still supports traceability because it creates a far higher quality product. Cow-calf



producers are threatened that their ranch will be audited subsequently publicized or humiliated (I12). I12 believes the USDA is going to provide assistance, not punish.

An expensive large-scale traceability system would be unfavorable to cow-calf producers (I3). A traceability system could require so much information that cow-calf producers would find difficulty ensuring it is accurate. I6 is concerned about a traceability system having so much data that is difficult to comply; for example, knowing the sire of a calf, as some producers run six or eight bulls with a few hundred head of cattle at the same time. Providing information to federal authorities would cause people to ‘puke a little bit’ because there is a major distrust of the government and hesitancy to provide too much information (I6). The government could use the information to harm cow-calf producers. I8 sees sharing information as pointless unless bought directly from the producer. Problem areas of a traceability system would be large labor requirements and not receiving useful information back from the supply (I8). I11 is concerned that a traceability system could lead to people not purchasing beef from a certain producer. People who have a negative experience at a restaurant or purchasing beef at a supermarket say they will not eat there again or purchase that brand of meat. People will know exactly what ranch the beef they buy came from. The negative experience might not have anything to do with the producer affecting innocent people (I11). I15 is concerned the cow-calf producer will get paid the going rate and then increase the price as the beef goes up the supply chain to the feed yards and packers. The premium has to flow all the way down the supply chain. Cow-calf producers are not going to take the time and effort to produce a premium product without compensation (I15).

### **Insurance Policy**

An insurance policy would ease the concerns of cow-calf producers by protecting liability. I1 thinks an insurance policy would help more cow-calf producers participate in a traceability system. He would purchase an insurance policy that has a 90% replacement cost or is similar to automobile insurance (I1). The added cost of an insurance policy with currently low

profit margins could make insurance unaffordable to cow-calf producers (I12). Only cow-calf producers who are not relying on cattle to produce an income would purchase insurance. A better option would be USDA providing cow-calf producers with insurance or cover cow-calf producers (I12). I2 believes protecting liability will be vital in the success of a traceability program. How far back down the chain will liability go because we have traceability data? Cow-calf producers need liability protection to be willing to share data and information (I2). A specific problem with a specific cow-calf producer needs to be addressed and fixed (I7). The beef industry can help correct the problem, instead of punishing them for something that accidentally happened (I7). I8 is not concerned about liability.

### **Attributes of an Effective Large-Scale Traceability Program**

*Traceability needs to be catered to small to medium size American ranches. The beef industry does not need to be streamlined for there is no option. On the other hand, cattle in traceability programs need to be funneled through certain high-quality operations. Cow calf producers need a premium for participating, which can be accomplished by beef checkoff dollars funding the program, where cow-calf producers pay a certain amount per head knowing they are going to receive a premium for their cattle, or the government giving \$10 a head. Additional funding would need to be widespread to ensure a large number of cow-calf producers are involved. A block chain needs to be established where multiple people can input but no one has total control of the database. Data should be shared up, down, and across the value chain and offered in the aggregate, showing the rank of each cow-calf producer and feedlot. Accountability and high quality needs to be at every step of the beef supply chain. Cow-calf producers need to know exactly when their cattle are sold. Consumers need to be aware of a traceability system and be told a story to understand what conditions cattle are raised under. Consumers would prefer to see the cattle, but it is hard to harvest them if we start naming them.*

An effective large-scale traceability system would entail certain attributes. It would be a tremendous positive to share data up and down the value chain and across the value chain (I2). The improvements can be shared among all cow-calf producers. The data could be offered in aggregate to show the rank of each cow-calf producer and feed yard among their peers (I2).

Cow-calf producers need to see a benefit (a premium for participating) to achieve large-scale traceability (I1). The program could be funded with beef checkoff dollars or cow-calf producers paying an amount per head to participate knowing they will receive a premium for their cattle. Producers and beef importers currently pay \$1 per head on cattle they market or import (I1). There needs to be aid until the price of implanting an E.I.D. tag decreases (I3). Additional funding toward a traceability system would have to be widespread across the industry to get a large number of cow-calf producers involved (I5). That can be achieved through government funding or the cow-calf producer getting extra value on traceable animals. I5 thinks the government giving something similar to ten dollars a head would be beneficial to have large-scale traceability.

The technology needs to improve. In the future, producers with drones will be checking and reading cattle (I3). There has to be the capability to read from distance (I3). Traceability soon will require an electronic ear tag in the cattle (I6). Cow-calf producers will have to keep the data and attribute it to a particular animal (I6).

There's a big push for Mandatory Country of Origin Labeling (MCOOL) (I3). Traceability is necessary before we have MCOOL. I3 has seen a feedlot of Mexican calves and looking at them he cannot confirm the cattle came from Mexico. NRI would work as third-party verifiers providing spot checks to verify that a cow-calf producer was not bringing in Mexican cattle and putting an E.I.D. that said the cattle were US product (I3).

I5 thinks there has to be a block chain established with multiple inputs without anybody having total control. A block chain is where multiple people can input, but they do not have access or complete access to the database. Who controls the database needs to be discussed (I5).

Cow-calf producers need to know exactly when cattle are sold (I8). The pilot project needs to establish return clients because of the quality from the research and traceability. A traceability program needs to be streamlined and fairly simple, allowing cow-calf producers to see the data within a year about the animals who went to the feed yard and processed into the program. In order to be useful, cow-calf producers need to receive information such as carcass quality, cattle gain, and health issues quicker (I8).

I9 and I10 would support a traceability system that allows their beef to be sold on the international market. The restrictions and the requirements have to be reasonable and self-evident. The benefit has to be greater than the effort that is required. The whole ranching industry is more likely to approve of a traceability program that caters to small to medium to average size American farms and ranches without taking on the risk or worry of negative consequences of a violation (I9).

Consumers need to be aware of a traceability system. I11 thinks there should be a way for the consumer to know the way beef was raised. The consumer would know the region of the country the beef came from and how it was cared for. He does not know if there is going to be a name and a phone number on a package of beef (I11). The consumer needs the full story on where beef came from (I12). Traceability is where people can cook beef with confidence because they know certain information, such as produced in the United States and BQA certified. Traceability would tell consumers disease outbreaks in the vicinity of certain ranches. Traceability would address the following questions. Where cattle are raised? What kind of programs a cow-calf producer follows? There is a story for consumers to understand the

conditions cattle are raised boosting confidence. How can we assure consumers that the beef they buy is going to be what they desire? Consumers need to see something clear and transparent to understand quickly. Gossip (someone the producer knows tells a person the producer does not know how the producer produces quality beef) is one way for consumers to know the food a cow-calf producer produces is safe when selling to people the producer does not know (I12). I11 to a certain extent thinks consumers would be more comfortable buying beef if they saw the cattle. It is a balance though, because if we start naming cattle it is hard to harvest them (I11).

Time and facilities are two key factors of producer participation in traceability programs (I14). Some smaller cow-calf producers do not have working pens and facilities to handle cattle, and there is no consistency when they are marketing cattle. Traceability has to be done at the sale barn level to account for these kinds of producers. Another option is selling cattle directly from the ranch to the feed yard, eliminating cattle being comingled and sorted at multiple sale barns (I14).

A traceability system needs more accountability at each step and more faith in the process (I15). All members of beef supply chain commit to actions at their level and are part of an overall operation to produce high quality beef for the consumer. He puts in effort, time, money, gives vaccines, and buys high quality feed. The feed yard then feeds them junk, and the processor does not process them right. It ends up not being high quality. Premium cattle at the producer level is wasted without having quality throughout the entire supply chain. He is not going to commit to a traceability program if not going to have the end result (I15).

I15 worries that a traceability system would make the beef industry too vertical. He does not want to be streamlined with no option. By the same token, traceable cattle should be funneled through certain high-quality operations. People who purchase a seventy-dollar steak at Capital Grille expect high quality all throughout the beef supply chain. Producers need to be compensated

for the extra responsibility, work, and documentation a traceability system entails. He does not want to do the extra work that traceability and record keeping entails to have it diverted and end up at Golden Corral (I15). Quality beef needs quality throughout the entire beef supply chain.

### **Large-Scale Traceability Might Force Some Cow-Calf Producers to Leave the Industry**

*A traceability system holds members of the beef supply chain accountable for their actions. A cow-calf producer who is known to produce low quality cattle will be forced to improve or get out of the business. Traceability is almost a necessity to be a viable business. Government involvement could cause smaller producers to leave the industry. Ag exemptions play a role in people deciding to raise cattle, and traceability will lead people to find other means to get an ag exemption on their land. The majority of ranches in the United States are small. It is a lifestyle to sell calves at the local sale barn for a smaller producer, and traceability might not change that.*

A large-scale traceability system could force certain cow-calf producers out of the industry. I4 thinks cow-calf producers are either going to be forced into traceability or not survive economically. There is a lack of urgency from cow-calf producers who make a sole living in agriculture versus cow-calf producers such as I4 who have other sources of income. Traceability is almost necessary for his ranch to be a viable business (I4). Traceability eliminates the inferior cattle (I6). People do not want to tag animals or E.I.D. them, and I6 thinks they should. Traceability protects the cattle industry because it will be less likely to have a poorly run operation. If a cow-calf producer has a low-quality animal and everybody knows the ranch it was raised on, maybe that will either cause the cow-calf producer to stop producing the animal or get out of the business.

The small producer will be out of business. A substantial number of cow-calf producers do not have working pens, and their cattle are semi wild (I6). A substantial number of people

when the government gets involved will start raising something else. The majority of ranches are small. Data from the Texas Southwest Cattle Raisers says in Texas the majority of ranches are 75 acres or less and 90% of the cattle were raised by 10% of the ranches. The cow-calf producer with four or five head of cattle will leave the beef industry because it will not be economically viable to implement a traceability system. Ag exemptions play a role in people deciding to raise cattle. In Texas, you get an ag exemption on the value of the land if have a cow on a hundred acres of land, and traceability will make a lot of people find alternatives to get their ag exemption (I16). It will be difficult for smaller cow-calf producers to implement a traceability system (I14). The average cattle herd in the United States is less than 50 head. The larger cow-calf producers can implement traceability and see the benefit. He does not see a traceability system leading smaller cow-calf producers to leave the industry. The cow-calf producers that have 10-15 head of cattle have bragging rights when they go to the coffee shop and say they have cattle, making it a lifestyle choice for them to sell calves at the local sale barn (I14).

I14 sees profitability as an issue of why the United States does not have traceability on a large scale. Every time the beef industry needs to know something cow-calf producers have to join a group and pay a fee, and it seems like it is never enough (I13). Cow-calf producers then sell their premium product and fight over the price (I13).

### **Role of the USDA**

*Cow-calf producers have differing opinions of the role of the USDA in a traceability system. Many cow-calf producers have confidence that the USDA could manage a traceability system effectively. The USDA is the government governing body for food production so they could fund the traceability system. Many cow-calf producers have concerns about the USDA managing the traceability system. The USDA, like most government organizations, is less efficient than the private sector. Bureaucracy scares certain cow-calf producers. Private companies such as IMI Global or NRI could manage a traceability system better, and a third party would be best to*

*standardize the database. Many cow-calf producers want the USDA involved in a limited way. The USDA needs to develop a standard definition for traceability, similar to what they did with organic. Traceability needs to be under an umbrella managed by the USDA. One cow-calf producer does not want any government involved. NCBA, Cattlemen's, and R-Calf should form a taskforce. The involvement of the USDA is based on socioeconomics and the philosophy of people.*

Cow-calf producers have varying opinions of who would be in charge of a traceability program, especially regarding the role of the USDA. Many cow-calf producers have confidence that the USDA could manage a traceability system effectively. The USDA will probably be the lead agency associated with a traceability system, paying part of the costs of traceability (I5). I12 expects the USDA to be the head oversight of traceability because it is the government's governing body for food production. If one takes a tainted ibuprofen that get traced back to a facility, the USDA is in charge of the traceability, who will tend to it, and inspection of the facility to find out what happened (I12). I10 believes government administration of, input in, and somewhat control of the data is necessary to compete with Argentina, Australia, and Europe. The USDA has to work in a collaborative way with cow-calf producers and establish the criteria or American beef will not have merit in other countries where government agencies do it (I10). The USDA will ultimately have negotiations with Europe, Japan, and Australia (I9). Cow-calf producers have to agree on elements of a traceability system that leads American beef being sold internationally (I9). I7 believes traceability would have to involve the USDA.

Many cow-calf producers have concerns about the USDA but are not sure who else would be in charge. The USDA is a logical place for traceability, but the bureaucracy scares him in being able to effectively run it (I4). I4 has experience working in high-ranking positions of federal government, and he is not overly excited about bureaucracy. USDA would handle enforcement, regulations, collecting data, and publishing the data (I8). Traceability would be



better run if did not involve the USDA because a typical government organization is not user friendly, is overworked, and is understaffed (I8). I15 thinks the government should add traceability to the USDA's oversight and responsibilities; however, the USDA (similar to most government operations) is the most inefficient at operating programs. The USDA can do a traceability program nationally, and a private company managing a traceability system would require a profit margin (I15). I11 sees how the post office operates and other government entities. He hopes the USDA could handle managing a traceability system but is also open to an independent company being in charge such as NRI with the infrastructure to manage a traceability system (I11). I14 thinks a traceability system almost needs the USDA for government oversight; however, a private company such as IMI Global or other leaders in E.I.D. tags would manage it better (I14).

Many cow-calf producers prefer the USDA involved in a limited way. I1 prefers the USDA to not have an integral role. The USDA could have access to the data, but he would not want the USDA knowing what cattle he produces, to be in charge of implementing the program, or setting the rules of a traceability program. A third party would be optimal to standardize a database. A cattle record software company, NRI, or a university would allow information to be captioned by electronic identification and key it in to them. Universities and cow-calf producers work collectively to set up standards within the region to improve operations (I1). I2 thinks the USDA needs to be involved in ensuring that the programs and companies created fit into the certification program created. This prevents one from claiming whatever they want to claim. For example, producers can claim it is grass finished because the last 10 days they lived on grass. The USDA needs to ensure definitions are clarified and a standard has to be met, similar to what they accomplished with the organic certification. The USDA clarified the following pertaining to organic. What does organic mean? What is an organic program? I2 does not want the government involved in each individual marketing program. I6 wants the USDA to handle straight uniformity

of the tracing to avoid 50 different protocols if left up to the individual states. Traceability needs to be under an umbrella, and the umbrella ought to be managed by the USDA. I6 hopes the USDA will not be so politically inclined to try to placate some people that know nothing about the cattle industry.

One cow-calf producer (I3) does not want the USDA or government involved because there are too many government regulations. NCBA, Cattleman's, and R-Calf should create a task force that collectively work together (I3).

The involvement of the USDA depends on the philosophy of people. I9 states the role of the USDA is based on socioeconomics. Do you vote Democrat or Republican? Do you force it on the industry or does the industry adopt traceability itself (I9)?

### **Managing Animal and Food Safety Incidents**

*Most cow-calf producers believe a traceability system is necessary to manage a food disease outbreak. A disease traceability system needs to be implemented first before a marketing traceability system. Effective contact tracing through I.D. tags could prevent a total shutdown by eliminating all those not involved in the disease outbreak. You can eliminate all the cattle infected without liquidating healthy herds. Traceability can manage the outbreak and instill confidence in the ultimate consumer. The effectiveness of a traceability system in managing animal and food safety incidents depends on how contagious the disease is. An effective traceability system with individual I.D.s is necessary to handle foot and mouth because it is highly contagious. Producers are not going to want people to know diseased cattle came from their ranch. By the same token, they do not want to send contaminated cattle up the beef supply chain. The complexity of the beef supply chain makes traceability difficult.*

Most cow-calf producers think a traceability system is necessary to manage an animal or food safety incident. A disease traceability program is needed first to implement a marketing

program based off the disease traceability program (I2). There needs to be an E.I.D. program that knows where all animals are at all times. A reemergence of foot and mouth disease in the United States concerns the beef industry, especially since animals in shipment are often unloaded at the weigh stations and are mixed with animals from other ranches, making it easy for one infected animal to quickly infect thousands. (This does not happen too often in the beef industry. One of the reasons the beef industry keeps getting longer hours of service for trucking is because there is nowhere to unload cattle while drivers would be on their required down time.) If foot and mouth disease was detected in the United States the whole movement of cattle would shut down. However, if all producers used ID tags and kept adequate records contact tracing could limit the damage. The animals possibly infected would be depopulated and the places close by would be shut down, but some cow-calf producers would still be able to sell their cattle (I2). If the beef industry has a major outbreak of disease in cattle similar to the coronavirus, traceability would allow the beef industry to trace the source of the outbreak sooner, avoiding problems by restricting to a particular place early on (I3). I4 thinks disease management is a good example of how a traceability system could be helpful. I6 thinks traceability would be beneficial if we have another outbreak of mad cow disease. Traceability is necessary to manage a food disease outbreak and instill confidence in the consumer, as the last thing the cattle industry needs is for the consumer to lose faith in the product. The beef industry could isolate the problem to the source of the outbreak (I6). It is necessary to know location information to determine where the problem started (I8). Traceability allows for the exclusion of people that did not have any problems from a shutdown, allowing us to focus in on the problem areas (I7). A disease outbreak is a timing issue, allowing one to identify and isolate the set of cattle that need a recovery period quicker (I14). Traceability systems are effective and do the job they were intended to do and mitigate the spread of disease (I9). Traceability is a way to avoid mass disease outbreaks with the greatest pressure being from the public in response to something they did not have knowledge of to begin with. Traceability in Europe did not gain traction until there was an outbreak of mad cow

disease (I9). A traceability system is necessary to manage disease outbreaks (I12). Cow-calf producers have to be aware and commit actions that help specifically isolate outbreaks to alleviate and move forward. One has to look at the outbreak as a whole without traceability. For example, he remarked how he recently made a baked potato and it had a bad/cancer spot on it. He cut it out and could see the rest of the potato was good. Traceability can eliminate the infected cattle without liquidating healthy herds (I12).

A traceability system to some degree is beneficial for managing animal and food safety incidents. I1 thinks a traceability system is effective to manage animal and food safety incidents, but cow-calf producers are not going to want people to know diseased cattle came from a particular ranch. They do not want to liquidate their herd; however, he does not want to send contaminated cattle up the supply chain to be their problem (I1). (The interviewees thus express a contradictory notion that other ranchers should be held accountable for the health of their cattle but not their own ranch.)

A traceability system is helpful for only certain diseases. I5 thinks an effective individual I.D. tracing back to the cow is only helpful for highly contagious diseases such as foot and mouth. The current traceability system in the United States has effectively managed mad cow disease (I5).

One cattle producer is not sure a traceability system would be beneficial in an animal or food safety incident. The complexities of the beef supply chain make it difficult to trace the exact location of cattle; producers, feed yards, processors, and wholesalers have responsibility for the cattle at certain times (I15).

### **Do Consumers Care About Traceability?**

*Consumers care about purchasing quality cattle and traceability. Consumers could scan a QR code when purchasing beef to learn location information and certifications the ranch has*

*completed. Consumers care more about results, healthy cattle, and response to a disease outbreak quickly and effectively more than they care about labels. Consumers are more inquisitive today about where their product comes from. It is a comfort to consumers to know the environment in which cattle are raised. Consumers are conscientious about animal welfare and what they are eating. A traceability system allows consumers to be more open about consuming beef because they have confidence about how the cattle are raised and their health. A fear of one cow-calf producer is beef getting replaced with a meat substitute. There are two main types of consumers. One type cares about location information and handling practices. The other type wants to purchase beef and cook it with no interest in labels. There is a market for both main types of consumers in the United States. Traceability most likely will be a niche market similar to organic. A large segment of consumers will not be willing to pay more for traceable beef. The question of who is the consumer needs to be addressed. Is it a government agency in Europe or China? Is it the United States consumer? Are they retail consumers or big consumers? Retail consumers probably do not care about traceability. Big consumers such as McDonald's and Burger King care about traceability because it gives them a competitive advantage.*

People are willing to pay a premium to ensure they are getting quality meat and are going to require the location information of the meat they purchase (17). Consumers care if a ranch is certified as good animal handling and have completed certain trainings such as being BQA certified (12). Consumers would be happy to scan a QR code on the package to find out more information about location information or animal handling practices that have been certified for this program. Consumers have no interest in knowing the nuts and bolts of the system, but they expect good and safe meat. His thinking from a rancher's perspective is he wants consumers to feel good about wanting ground beef. Consumers will purchase beef because they trust the label and know the rancher raises quality cattle. Consumers have probably more of a general concern. Consumers assume other operational practices are managed effectively if raised well. Cow-calf

producers have to undergo certification to verify they have raised their cattle in a quality manner (I2). Consumers care more about results, healthy cattle, and response to a disease outbreak quickly and effectively more than they care about labels (I3). Cow-calf producers who adopt traceability are doing their best, and consumers prefer to hear that (I3). Consumers are more interested in traceability today than 10 years ago (I14). Consumers are more inquisitive today about the meat they consume. They are asking the following questions. Where did that calf come from? What was the heritage? How was it handled? Where was it processed? A growing trend among consumers is direct purchasing forcing cow-calf producers to set aside a consumer or lose product share (I14).

Consumers are comforted when they know the environment the cattle are raised (I11). He used to attend church with a couple of couples who would inquire about beef, and they were overwhelmed at how good his beef was. It was a comfort to them that the beef came from a place where one could see the cows grazing and standing in the shade and were not unusually stressed (I11). Consumers care about traceability because there is a large urban population such as his wife and sister-in-law that buy organic simply because they think it is better (I1). You cannot argue with them that organic may not have added nutritional value. Everyone he knows tries to purchase non antibiotic or no hormones beef, and his biggest fear is beef gets replaced with a meat substitute (I1). Traceability is inevitable because consumers are conscientious about animal welfare and what they are consuming (I12). He has a liberal daughter and friends who are afraid to purchase beef especially now because of coronavirus concerns. Consumer confidence needs to be addressed from the slaughterhouses' aspect for the consumer to not be afraid of beef and meat. A traceability system makes consumers more open to consuming beef because they have confidence about how the cattle are raised and their health. Cow-calf producers want to ensure the consumer is comfortable. The consumer does not understand what a traceability system is per se (I12). If consumers knew what a traceability system is they would be in favor of it, but most

consumers are not aware if a traceability system is implemented or not (I8). Consumers would be educated about traceability through multiple advertising initiatives (I8).

Consumers need a full story about the beef they purchase (I12). For example, his neighbor buys a mixed bag of cattle from a variety of places including Florida and Mexico. His selection criteria is buying the least expensive stockers, putting them on grass, raising them a certain way, and then sending them to a feed yard. Genetics do not factor into his production practices. There is a market for cow-calf producers like him because a large segment of consumers want the least expensive beef. Other consumers care about the environment the cattle are raised and seeing a bull living a life of leisure in a beautiful pasture with wonderful cows and all the cute babies. Stories like that decrease the perception that cattle are raised on factory farms (I12). There are two main types of consumers (I15). One type wants to know where beef comes from and how the cattle are handled. They are willing to pay more to get a premium product that is USA grown, USA feedlot, and USA packed. They will pay to know the state the beef was raised on such as from Texas, New Mexico, or Colorado. The price will factor in the decision because people are willing to buy the \$70 steak at Capital Grille, but they won't pay this price every night. The other type of consumer wants to buy beef and cook it, and they do not care about the other information. When they purchase beef, they expect it to be safe. There is a market and a niche for both types of consumers. All consumers expect the supply chain to be safe. The consumer who does not care about location information is going to have to pay more for beef with a traceability system and pay for oversight. At some point the consumer is not going to pay that much for hamburger meat. The beef industry is jeopardized because the requirements, regulations, and costs did not give the consumer what they needed (I15).

Consumers dictate the actions of cow-calf producers. Cow-calf producers only care about what the consumer cares about (I9). Their opinion is steered as a slave to the opinion of the consumer. Their ideas are going to be based on the consumer demand or the regulatory demands

to keep the consumer safe and knowledgeable about where their beef is coming from (I9). How do you define the consumer (I10)? Is it a government agency in Europe or China or the United States consumer? A very small percentage in the United States see the value of traceability; the rest do not (I10). Consumers would say they care about traceability; however, he does not think consumers will pay more for traceability to a great degree (I5). A segment of the industry on a high-end whole food type deal will pay more for location information, but that is not a significant number of consumers (I5). Certain regions of the world mandate traceability or prefer it (I10). Meaning from their perspective if they want to expand their market access traceability is needed to meet customer demand (I10). Is the customer a governmental agency, regulatory agency, or the end customer (I9)? He doubts the average consumer cares about traceability, leading traceability to become a niche market similar to organic (I9). Consumer should be more clearly defined (I4). Retail consumers probably do not care about traceability, but they should. The big retailers such as McDonald's and Burger King care about traceability because gives them an edge on the competition and proves their meat is superior (I4). Big corporations prefer to know where they are getting their meat (I7).

The media will play a crucial role in how consumers perceive traceability. Consumers are going to demand traceability because the consumer can be easily convinced they should not eat anything unless it is traceable (I6). He questions the validity of the information consumers would get. Fox News you hear the facts, and MSNBC you hear the facts are all different. Whoever is disseminating the information is going to disseminate information that is compatible with their ultimate objectives. The public tends to relish bad news so, the news has to be negative or people will not listen to it. There is an inclination to scare people to react. He worries there will be bad information given to the public. Whatever the media wants people to think they are going to try to make people think that way (I6).



## **Traceability Altering Market Power**

*A traceability system could alter the market power of cow-calf producers. Traceability could lead to some producers receiving a premium because consumers will be willing to pay more for beef if they know who raised it, how it was raised, and have faith and trust in the cow-calf producer. Packers are going to have to pay more for traceability as well. Those who choose not to participate could see negative consequences by seeing a reduction in their market power. There needs to be enough public information to market cattle effectively, but confidentiality and contracts are protected. Feedlots and packers could leverage information against producers. Certain types of cattle may not be allowed in a traceability system. The hope is traceability improves the marketing power of cow-calf producers.*

Cow-calf producers not participating in a traceability system could undergo negative consequences. A traceability system empowers those willing to get involved, and it would take power away from those who are not (I2). There is a subset of ranchers that want to return to the prior marketing ways that emphasized pounds. Cattle sold on the grid makes it difficult for price discovery. Cattle sold on the grid are cattle priced on an individual basis. He thinks the changes will benefit the beef industry. There needs to be enough public information to market cattle effectively, but confidentiality and contracts are protected. He has worked hard to put his cattle at the top of the premium list. He does not want to receive the same money as the cow-calf producer who has done no work to their cattle (I2). Companies such as McDonald's will pay a premium to have higher quality traceable beef (I7). Consumers will be willing to pay more for beef if they know the producer who raised it, operational practices, and have faith/trust in the cow-calf producer (I11). A premium allows cow-calf producers to gravitate towards traceability or at least the profit maximizing producers (I12). There will always be some cow-calf producers that do not want traceability because they lack man power and education (I12). Regime and protocols will

cause less cattle in the system (I6). Traceability will lead to less cattle being sold, which will increase the demand for beef (I6).

A traceability system needs to be available for all cow-calf producers. He cannot think of negative consequences as long as it is available for everybody (I4). There could be some questions if not available for everybody (I4). He perceives that traceability would gain him market power (I1). He is sure it could hurt him as well because feedlots and packers could leverage information against him (I1).

Certain types of cattle may not be allowed in a traceability system. A feedlot in the panhandle of Oklahoma told I3 this was the last load of Brahmas they were allowed to take to the packing plant they had a contract with because it was too much effort to cut out the hump. The packing plant is forcing the feedlot to not buy a brand of cattle. Producers of Brahma cattle will have to find an alternative feedlot (I3).

Market power changing is an unknown; they hope it will improve the marketing power of cow-calf producers (I14). The packers are going to be one of the main bottlenecks of traceability because probably going to have to pay more for it. A traceability system is negated on who is going to spend the time to do it if someone is willing to pay more for it (I14).

### **Risk of the Cattle Industry Turning into the Swine and Broiler Industry**

*The swine and broiler industry primarily rely on contract farming; family-run cattle operations typically are opposed to contract farming. Producers are forming coops and joining organizations such as Integrity Beef to prevent contract farming. There are differences in raising cattle than raising chickens and pigs. It will be difficult to have the equivalent of farrowing houses in the cattle industry. The time to incubate an egg for the swine and broiler industry to being on the plate is a lot faster, requires less capital investment, and less land than the cattle industry. The cattle industry takes a decent amount of acreage, time, and effort. The coronavirus*

*pandemic exposed the weakness of the contract farming system. Thousands of healthy hogs had to be euthanized, and consumers could not purchase meat at the grocery store. The beef industry has to institute smaller, more regional, processors. The cattle industry could already be turning into the swine and broiler industry according to one producer. Contracting has taken over the biggest part of the industry. It is inevitable that traceability leads to more contracting of cattle. Many cow-calf producers, however, say traceability is not synonymous with contract farming.*

The swine and broiler industry is similar to contract farming. Cow-calf producers vary on whether a large-scale traceability system could lead to that happening in the beef industry. Family run cattle operations typically do not want to see that happening in the beef industry. They hope that does not happen (I9 and I10). They do not see that happening in their lifetime because large corporations have already bought producing operations where they have not licensed or franchised it out to smaller cow-calf producers. Cow-calf producers are forming together to prevent that from happening, the Integrity Beef program being an example. They do not want to work for a big industrial conglomerate, but they would be comfortable joining a co-op where they would still retain the assets of their ranch (I9 and I10). He hopes that contract farming, where a large corporation owns the ranch and pays the producer a contract price does not become widespread in the beef industry because it would not be a positive thing for ranching, and the ranchers will revolt (I12).

Some cow-calf producers talk about the differences in raising cattle compared to chickens and pigs. I3 and I6 hope the cattle industry does not turn into the swine and broiler industry. He does not think you could have the equivalent of farrowing houses for pigs in cattle (I3). The cattle industry has seen the issues of the broiler and swine industries (I6). The cattle industry is unique enough where it takes a lot of acreage, a lot of time, and effort. He admits to not knowing a lot about the swine and broiler industry. A traceability system is not synonymous with contract farming (I6). The time and capital investment in the cattle industry versus the swine and broiler

industry make contract farming difficult (I14). The time to incubate an egg to being on the plate for the swine and broiler industry is a lot faster, and requires less capital investment and land than the cattle industry (I14).

The cattle industry turning into the swine and broiler industry is a concern for cow-calf producers. It is a possibility, though, and that is the biggest fear of producers (I15). The coronavirus pandemic exposed the weakness of that system. The hog industry once euthanized thousands of healthy hogs because the processor they were contracted to go to shut down. At the same time, consumers could not purchase meat at the grocery store. There is no excuse for that happening in the United States. It is a nationwide issue that needs to be addressed. The beef industry has to implement a system unlike the broiler and swine industry by having adequate capacity. The following questions need to be addressed. How do you divert that food supply to other places? Do you need smaller more regional processors (I15)?

The cattle industry could become similar to the swine and broiler industry. It is already happening (I5). Contracting has engrossed the biggest part of the industry the feedlot cattle. There are contracts happening at the stocker phase for cattle going into the feedlot. He has a different perspective because he raises cattle for a college. He sees this as beneficial for larger cow-calf producers and not beneficial for smaller cow-calf producers. It is inevitable that traceability leads to more contracting of cattle. The consolidation into larger and larger cow-calf producers is inevitable regardless of traceability (I5).

### **Traceability in Other Countries**

Traceability systems in other countries are more advanced, efficient, and well established. Many cow-calf producers notice that other major beef exporters have established traceability systems. Several countries have adopted traceability systems (I5). The United States is currently a cluster, which negatively impacts foreign sales. The reason is somewhat of a political debate. The

independent nature of cow-calf producers looks favorably on the unregulated nature of the cattle industry. The way cattle are traded at sale barns makes collecting traceability information difficult (I5). The United States is losing export opportunities because lack a traceability system (I9). The United States is one of the few countries that does not have traceability throughout the supply chain (I14). Profitability is one reason because cow-calf producers need a premium in order to participate. The size of United States cattle ranches is typically smaller than other countries. The average beef production herd of U.S. cattle producers is less than 50 head. Smaller cow-calf producers adopting traceability is going to be a challenge, but the larger cow-calf producers see the benefit (I14).

### **Concerns about Importing Foreign Beef**

Other cow-calf producers are concerned about importing foreign beef because they are not sure what their traceability measures are. Traceability would allow people to know how other countries are raising their beef (I7). Traceability needs electronic ear tags in every animal throughout the system (I15). Imports are going to be a problem because we do not know the handling practices of other countries and they may not meet the requirements of United States beef. Imported beef needs to have certain standards. How to enforce it will be another issue. The USDA can only enforce laws in the United States forcing foreign governments to comply or the United States stop imported beef that fails to meet certain requirements (I15). The whole process needs to be changed before talking to cow-calf producers (I8). He has heard of beef labeled 'produced in the United States' because the animals were processed and/or finished in the US, but were not actually born or raised in the United States. Consumers that want to buy meat produced in the United States need to know that information (I8). I13 prefers to purchase American beef instead of South American beef or Australian beef

## **The Average Person Does Not Know A Lot about the Cattle Industry**

Cow-calf producers believe that most people are not knowledgeable about cattle production. They seem annoyed when people try to tell them how to raise their cattle. I11 does not want a person coming to the ranch and scolding him because his cows are outside. Some people are surprised that his cattle are outside in the rain and mud. The animals ultimately have to live outside because it is not practical to have stalls for 500 cows. There are things that the average person does not understand. He eats beef as much as anybody. He knows people that do not eat beef and act like it makes them healthy, and they are the sickest people he knows (I11). I12 thinks that people have a vision of what a factory farm is. Most of the cattle are raised on family-owned ranches who work hard to produce the best cattle. Consumers do not understand what traceability is per se and what a family-owned ranch that produces cattle under BQA means (I12). People have no idea what it takes to raise animals especially after his interactions with an IRS agent (I6). People think his ranch is a nice place. They inquire about what he does because they think all the animals do is eat and poop. I6 responds with sarcasm that all he does is watch the animals eat and poop. The average person has no idea about where their beef comes from (I7).

## **Coronavirus Effects on a Traceability Program**

Some cow-calf producers mentioned the coronavirus and the effects on the beef industry. Coronavirus may set back the trend of non-antibiotic beef and no hormones, but I1 eventually thinks it will take over. The question of whether consumers will pay more for traceability may have been answered during coronavirus. During quarantine, consumers were purchasing any ground beef and did not care about labeling (I2). It infuriates I13 that during coronavirus the beef packers were shut down and the United States had to import foreign beef. Coronavirus exposed the weakness of a market being too vertical (I15). Hogs were required to go to certain processors, and they were shut down. One could not divert and go to a different processor. This created scenario where the consumer could not get food such as bacon, ham, and sausage at the grocery

store, and producers had to euthanize their crop receiving no income for those animals. The beef industry has to set up a system that differs from the swine and broiler industries (I15). The United States is fickle by ignorance (I9). Coronavirus is a perfect example of Americans only caring about what is immediately in front of them. Society did not know that they needed to be afraid of a pandemic until a pandemic was in front of them. An outbreak of mad cow disease in Europe created a need for traceability in Europe is another example (I9).

### **Cattle Industry not a Profitable Business**

The cattle business is not a profitable business for cow-calf producers. It is challenging to make money raising cattle because costs go up and commodity prices are flat or decreasing (I6). The United States market for beef is flat to falling thus the growth and market potential is internationally (I10). Products have to be aggressively positioned in Europe and Asia for the foreseeable future to have price supports. He would like to follow other country's rules regarding traceability (I10). Profit margins for cow-calf producers are negative because of the market (I12). He is disappointed as a businessman in what a sorry business raising cattle is (I13). He thinks NRI should promote that the beef industry is not a profitable operation. You can barely make a hundred dollar a head profit after a year of hard work. The biggest challenge is paying overhead and making a profit with the current commodity prices (I13). It is hard to make money in the cattle industry (I4). One way to make money is to transition from primitive methods of farming to more sophisticated techniques such as traceability (I4).

### **Finding a Standard Ear Tag**

The beef industry is struggling to find a nationwide standard ear tag (I2). There is a more expensive, better ear tag. Low frequency tags are already being used, and everyone can read those tags. Investments have been made in a more expensive reader that can read ID tags at the sale barn in groups of cattle instead of one by one. The beef industry has to standardize an ear tag. A

marketing program could lead to a standard ear tag, allowing cow-calf producers to be compensated when choosing the better ear tag. The marketing program could give cow-calf producers incentive to pick the better ear tag (I2). NCBA, R-calf, and the United States Cattlemen's Association would determine a solution by working together (I3).

### **Importance of Compromising**

People do not know how to compromise anymore (I3). I9 emphasizes compromising and communicating. Ranching can be a family business and extend internationally by conversation and mutual agreement. Maturity is necessary to be a businessman. What will cow-calf producers give up and take in exchange for being able to grow the business and still hold onto the core philosophy of what you believe (I9)?

### **Convincing Workers to Implement Recommendations of Noble Research Institute**

I4 struggles convincing his cowboys and foreman to implement practices NRI recommends. The cowboys and foreman thought employees of NRI were academics and did not understand the environment on the ranch. I4 had to explain to his cowboys and foreman that most of the NRI employees were raised on farms and ranches and had Ph.Ds. in various parts of agriculture. The cowboys and foreman were shocked (I4).

### **Sustainability**

I2 is an active member in cattle organizations. His definition of sustainability is: take care of the land, take care of the animals, take care of the people, and make money. His ranch has a foundation in those guidelines (I2).

### **McDonald's Project and Integrity Beef**

*Common verbiage of the Integrity Beef Sustainability Pilot project was the McDonald's project. McDonald's was the retailer in the supply chain. Integrity Beef is an organization and a*



*separate entity assisted by NRI. Integrity Beef members have to follow certain protocols. The direction Integrity Beef is going does not match one producer's goals, which is to start retaining ownership in a feedlot. There was some information given to cow-calf producers in the Integrity Beef program but not the Integrity Beef Sustainability Pilot project.*

I6 clarified what he meant by the McDonald's project (Integrity Beef Sustainability Pilot project). Common usage among the ranchers is the McDonald's project because McDonald's was the retailer in the supply chain. Cattle were sold by private treaty at the ranch. The project was orchestrated by certain employees at NRI and Integrity Beef. Integrity Beef is an organization and a separate entity under the umbrella of NRI. It is a tax-exempt entity set up with all the proper protocols. The mission statement is to improve cattle production and educate ranchers as to proper cattle operations, economic concerns, and proper treatment of animals. The 44-46 ranchers who are in the organization have to comply with certain protocols. One must have a 90-day breeding season. There are eight different breeds that the bulls can be a member of. The bulls have to be in the top 20 percent for weaning weight and yearling weight. Integrity Beef recommends top 20 percent for birth weight, especially with the Charolais Bulls because of the historical problem with their weights. The calves that are born must have certain health protocols and injections. The calves have to be knife-cut castrated and cannot be banded. They cannot have a horn or scur. They have to be healthy and cannot be a "sorry ass looking calf." Integrity Beef commands a premium because of the reputation of the calves. There is a sale at El Reno, Oklahoma City West in the first week in December or November. The ranchers involved would sell 2,000-3,000 of similar cattle. (Cattle were previously grouped by weight now are grouped by ranch). Information sharing was used to compare the performance of different ranchers' cattle. I6 provided as much information as he could. The pilot project provided information on carcass quality, but this information is not provided in the Integrity Beef program (I6).

The direction Integrity Beef is going does not match his goals (I1). He will maintain his membership, but this will be the last year he will market through Integrity Beef. Integrity Beef is not becoming a supplier for a packer, and he wants to lock in a price that is good for him. He is willing to get paid for supplying information so he can know year to year how his cattle perform. He has negotiated with a feedlot in western Oklahoma who markets primarily to the Japanese and international market. The feedlot will do all the marketing and hedging. He wants to start retaining ownership in a feedlot. He does not think Integrity Beef is going to do that (I1).

There was some information given to cow-calf producers in the Integrity Beef program but not the Integrity Beef Sustainability Pilot project. I9 and I10 said they did not get a sale comparison price per pound comparison from the pilot project. Morbidity (how many cattle are sick) and mortality (how many cattle died) are given in the middle of the process. Ranchers received information on whether a calf was pulled (removed from the herd either for treatment or observation) because it got sick and the number of calves that were purchased and put into the pilot program. After slaughter, they received information on cattle carcass quality. The only sales performance they got in comparison to other cattle producers was through an NRI employee, but it was for all cattle in the Integrity Beef program, and not for each rancher (I9 and I10).

## CHAPTER V

### IMPLICATIONS AND IDEAS

This research began with a simple question: what type of traceability program would be viewed favorably by cow-calf producers? The benefits of a traceability program are many and much of the supply chain is motivated to establish a program, but cow-calf producers have traditionally been the most reluctant segment of the supply chain. To help identify a program meeting the approval of cow-calf producers, this study evaluated an actual traceability system implemented at a pilot-scale, where cow-calf producers from the US southern plains sold their preconditioned cattle to a supply chain consisting of a single feedlot, beef packer, wholesaler, and retailer. Cattle were traceable throughout much of the supply chain and information was exchanged upstream and downstream. This seems to be the type of traceability system many in the beef industry are striving to create, so it is important to evaluate its success at the pilot-scale.

This pilot program was evaluated from the perspective of fifteen participating cow-calf producers. Personal interviews were conducted with each producer to gauge their willingness to continue in the program, their perceived strengths and weaknesses of the program, and a variety of other issues concerning traceability. The previous section documented the statements and attitudes made by these fifteen interviewees. This section provides an objective perspective on what those statements imply about the ability of the pilot program to serve as the foundation for a large-scale traceability system.

The interviews suggest that the pilot program was indeed a success and can serve as a prototype for a successful large-scale beef traceability system. This conclusion is based on the fact that (a) most wish to continue participating in the future and (b) criticisms of the program were largely cosmetic and can be remedied with relatively small changes. Of the producers who expressed an opinion of whether they would continue to participate, a large majority replied in the affirmative. Of the two who said they would not participate in the future, one remarked it was because they are instead participating in an even more progressive program. There were no substantial criticisms about the general strategy behind the pilot program or its implementation, and producers overall expressed general approval. Two producers expressed that they wish it was more than just a pilot project.

The pilot program was designed to share information up and down the supply chain, with feedlots receiving information on how the cattle were raised and cow-calf producers receiving feedback on the animals' performance. The handling of the information seems to have been successful. Producers felt comfortable sharing their production information with downstream supply chain segments, given the information was managed by Noble Research Institute (NRI), a non-profit research organization. Most producers found the information feedback useful and approved of the manner in which NRI reported it. While the program initially requested information that producers were unwilling to share (e.g., personal financial information), NRI quickly abandoned this request, and producers were comfortable with what they ultimately shared. (Some producers initially interpreted that NRI was asking for personal financial information, but NRI never did.) This demonstrates the importance of making the decision of which information to be shared a collaborative decision.

NRI played a pivotal role in making the pilot program a success, suggesting that the presence of a non-profit possessing the confidence of cow-calf producers is important for implementing a large-scale traceability system. What type of group would fit this description?

NRI is a research institution and may not have the funding to play such a role in a large-scale system. The beef industry has a history of building non-profit groups dedicated to promoting rancher's interest (the Certified Angus Beef program being a prime example). However, this would require an alternative funding and governing source, and the difficulty of doing so is unknown.

Perhaps the USDA can serve the role that NRI played in the pilot program? This might be welcomed by cow-calf producers, if it was government funded and was viewed as politically inclined towards ranchers (as opposed to beef packers, wholesalers, and retailers). The interviews demonstrated some enthusiasm for USDA involvement but some hesitation as well, so the potential role of the USDA as a manager of information-sharing is unknown.

Any information collected and shared in a large-scale traceability system should probably be related to animal identification and production performance and not economic data. Producers were not only reluctant to share economic information like cost and price data, but their frustration at how it was collected suggests economic data is difficult to compile systematically.

Producers are generally not in favor of mandating traceability. There is not enough trust within the supply chain and between ranchers and the government. However, their reactions to using traceability for disease prevention suggests an avenue for encouraging better traceability. All producers seem to recognize the economic damage that an animal safety incident like foot and mouth disease can inflict, and it is here where they recognize the importance of coordinating their efforts. Perhaps if a push for greater traceability was motivated by disease prevention, it would realize greater voluntary participation and greater acceptance of mandatory traceability?

The interviews at first seem to document a contradiction: producers do not want to suffer losses from the actions of other ranches, but at the same time do not want to be held responsible if their cattle results in a livestock disease or consumer food sickness outbreak. A closer look at

their responses resolves this contradiction though. Producers are fearful they will be held accountable for the actions of other agents downstream supply chain, so a traceability system would need transparent rules not only for how information is shared but how responsibilities are shared in case of a lawsuit.

Four producers described concerns about imported beef, which suggests an idea for encouraging participating in traceability programs. It is not an excessive generalization to group all cow-calf producers into one of two groups: one group who sees trade as an opportunity to sell higher quality beef at premiums, and another group who overlooks the value of exports and concentrates only on having to compete against foreign imports. The former is more likely to embrace traceability if it can be seen as a way of promoting US produced beef. Many in this latter group would like a mandatory Country of Origin Labeling law, but this is impossible due to trade agreements. However, a voluntary program promoting US beef would require some sort of traceability, and might thus induce those more hesitant to adopt traceability to embrace it.

In summary, the pilot-scale traceability program was largely viewed favorably by the cow-calf producers involved, suggesting it can serve as a foundation for programs on a larger scale. The major keys to its success are (a) an organization trusted by producers managing the data (b) involving producers in the design of the information collection protocols and focusing more on production than economic data (c) the program being profitable from the standpoint of premiums and/or preventing losses from disease outbreaks and (d) ensuring problems caused downstream cannot be blamed on producers at the cow-calf stage. In addition, a careful reading of the interviews suggests a number of ideas for promoting traceability, including a possible but limited role for the USDA, and promoting traceability as primary for disease-prevention and possible promotion of US beef.

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## APPENDICES

### Transcripts of Interviews

The location where producers mentioned certain themes are identified on the transcripts.

Three question marks mean what the interviewee said was unclear. .

#### Interview of Interviewee One

**Interviewee one** [00:04:11] This is Interviewee One.

**Interviewer two** [00:04:12] Hey, this is Interviewer two the grad student at OSU calling you again.

**Interviewee one** [00:04:18] Hi, interviewer two.

**Interviewer two** [00:04:19] Hey. Hey. Is this still a good time to do the interview?

**Interviewee one** [00:04:22] It is. You just called my cell phone and I don't always get good reception so I had you dial this number.

**Interviewer two** [00:04:28] I totally understand. I grew up on a row crop farm in Alabama. And we get we got cell service outside of our levee. But once we got inside our levee around our house, we didn't get hardly any cell service. So, I certainly understand that. Well, the main thing we're doing with this interview is asking you questions about your experience and Integrity Beef Pilot project, and we're going to mail you one hundred dollars in cash after the interview, so we're going to need a mailing address after that. And then like it said on the e-mail, we are recording this email and typed transcript to be prepared from the audio file file. And we'll even let you look at the copy and review it and make sure that it remains confidential and your name won't actually be used in the email. In the research, it will not contain any of personal information is as. Does that sound good?

**Interviewee one**[00:05:24] Yeah that's fine.

**Interviewer two** [00:05:24] Okay. And then this interview is mostly about beef and traceability. I like to share a workable definition of traceable beef supply chain. Which is a traceable beef supply chain is one where cattle and beef can be traced from the farms which the cattle are raised throughout the beef supply chain till the point of consumption. Where a single hamburger patty cannot be traced to the individual individual cattle, we think that's probably a little unrealistic from which it is made. It can be traced to a collection of farms. We are concentrating on a voluntary, not mandatory traceability system and one that cow-calf producers want to participate in not being forced by the by the government or any system. In this system information is passed down the supply chain from producers to meat packers to retailers, and information is passed up the supply chain from meat packers and retailers back to cattle producers. Such a traceable system

might operate through open markets, through vertical integration or something in between. Does that sound good? Did you have any questions about that?

**Interviewee one** [00:06:30] No, but I'm with that. Go ahead.

**Interviewer two** [00:06:32] OK. Awesome. So now we're going to start the interview and it's the first couple questions are gonna be about your participation in the Integrity Beef Sustainability Pilot project coordinated by the Noble Research Institute. So, my first question is, what did you like about the pilot project compared to the way you normally market your cattle?

Theme A Information Sharing

**Interviewee one** [00:06:54] The fact that I got feedback on how they performed.

**Interviewer two** [00:06:58] What kind of feedback did you get?

**Interviewee one** [00:07:00] Well, I actually got everything as far as their gain, their morbidity, mortality. And now that was primarily what I was wanting to know is how they gained and their health. And that was the thing that was really focused on. The grading I got grading information as well. So.

**Interviewer two** [00:07:29] That makes sense. What what did you not like about the pilot project?

**Interviewee one** [00:07:34] That it was only a pilot.

**Interviewer two** [00:07:37] Okay, that makes sense. How did you feel about sharing information about your operation and cattle with others?

Theme A Information Sharing

**Interviewee one** [00:07:45] I'm okay with that. In fact, I'm very much for it.

**Interviewer two** [00:07:51] Why? Why are you very much for it?

Theme A Information Sharing

**Interviewee one**[00:07:57] Simply because if I'm doing something wrong as far as a health protocol or cattle selection or whatever, well, then I get that feedback in so that I can adjust my program because I'll probably ultimately why I like to do is retain ownership through the feed yards. And so, getting that data now helps me do get ready for that. I will put it that way.

**Interviewer two** [00:08:22] Yeah, that makes sense. What information passed up the supply chain to you did you find useful passed up?

**Interviewee one** [00:08:30] I don't know that you would have ask the receiving end on that on what they found useful.

**Interviewer two** [00:08:35] Okay. Did you find any information not not useful?

**Interviewee one** [00:08:40] No.

**Interviewer two** [00:08:43] What steps were taken to make you feel comfortable sharing information about your operation, I know you said you originally felt comfortable sharing your information.

Theme D Steps Taken to Make Cow-Calf Producers Comfortable Sharing Information and  
Theme C Cow-Calf Producers Willingness to Share Information

**Interviewee one** [00:08:51] And, you know, they they said that then that it would be anonymous as well. But like I said, I probably ultimately, I'd prefer that as in normally done with electronic I.D. ear tags that that database be limited to who had access to it. I wouldn't want, you know, all the vet suppliers and all that kinda stuff getting that information trying to contact me through that way. So that's you know, I just I would want it only to be I wouldn't mind buyers being able to look at the information or feed yards either one but or research people. You know, I wouldn't mind that at all. But I just mean, I don't want to get bombarded by vendors.

**Interviewer two** [00:09:45] I don't blame you on that one at all. If the pilot project was made permanent, would you continue to participate in it?

Theme E Will Cow-Calf Producers Continue to Participate in the Integrity Beef Sustainability Pilot Project

**Interviewee one** [00:09:52] I would.

**Interviewer two** [00:09:53] Ok that's awesome. Were there any aspects of the pilot program that you would recommend changing?

Theme B Issues with the Information and Theme F Issues with the Integrity Beef Sustainability Pilot Project

**Interviewee one** [00:10:13] I wish there was a way that I could report everything online. I will put it that way because part of the integrity program is, they have a certain health protocol. And so, you had list what vaccinations you gave, the lot number, serial number, expiration date on that, when you did it, how you did who you did it with that kind of stuff. I wish there was some place where I could just enter that online and it would be accessible back to me. I mean I wouldn't even mind that Noble has talked a little bit about trying to integrate a little bit more with a company like Cattle Tags or somebody else that that has, you know, cattle record keeping. Somehow, if we could integrate all that together to where it was just a push of a button for me to where I put it into my my not spreadsheet, but into my cattle records that it would automatically flow up that I wouldn't have separate reports. So, if it was online where I was entering the information to begin with, well, then that would that would be helpful for me.

**Interviewer two** [00:11:31] That make sense. What what steps or involvement from who do you think would make that possible?

**Interviewee one** [00:11:39] Who would make that possible? You know, I could see it going a couple of different ways. But I would I would venture to guess I would take more of a third party that would that would kind of coordinate that because I know they have third party verification on natural beef and all this other kind of stuff. So I'm thinking it'd be more like a third party like that where we could standardize on some database for some cattle record keeping software that we could that I could feed my stuff here through, you know, my scale weights and that kind of stuff can be captioned by electronic I.D.. If I could do that and do my vaccines and do all that and just upload that to that for them or key it in directly, I prefer to, you know, not key it in more than once. But that I'm thinking is probably going to be a third party, you know, or university, Noble and their little pilot project. I know they did a lot of that grunt work for us. But then I think it's if it's if it's truly what I envision into becoming, well then, I think that the feedlots and packers and everybody else would want to be involved as well. To where that was to where we were all feeding the information to the same place and we could all draw the information from there.

Because I mean, for myself, I would like to know how my cattle are performing against everybody else's cattle and if their underperforming in what way can I improve that and being able to draw against that database without, you know, knowing as well as Joe Smith my neighbors got better cattle than me or somebody in Alabama or what. But what is it that's they're doing right that I'm not doing?

**Interviewer two** [00:13:46] Okay, that makes sense. What you said comparing to other beef farms and other cattle producers, what information would you specifically look at to know how you are comparing or would you look at all the data equally pretty much?

Theme B Issues with the Information

**Interviewee one** [00:14:00] Well I mean well because I know one of the issues that integrity has had is mortality, OK. And so, I know that they're trying to find and get a finger on what's causing that, whether it's just because we're we're producing terminal calves and we're pushing too quick to the feedlots or is it a vaccination program. What is it? But knowing that, having talked with them, they have talked with others it's not just us that are experiencing that issue. Lots of feedlots are having that issue with their calves is from my understanding. But being able to know about that would be great, you know, and any research, because right now, if I get any research, I can't really do an apples to apples comparison with my cattle because those cattle are a separate situation. They may be a different breed, a whole different program. So, but I know there's got to be other people that have a similar grass operation as myself and then will background the cattle a little bit and then send them to the feed yards and are their cattle performing better than mine health wise. Are they performing better? Are they grading better? Is their percentage of gain better? And so kinda look at how to select breeding you know my replacement bulls or replacement herd or that kind of stuff just trying to improve my program to make it more profitable. Without this common database I don't know how it's really how you can accurately do that.

**Interviewer two** [00:15:53] That makes sense. Do you believe the cattle industry will begin adopting traceable beef supply chains on a large scale?

Theme G Are Cow-Calf Producers Open to a Large-Scale Traceability Program, Theme I Cow-Calf Producers Concerns about a Traceability Program, and Theme K Attributes of an Effective Large-Scale Traceability Program

**Interviewee one** [00:16:01] I think COOL is going to gain traction. I don't know that you'll ever get it on a large scale. Farmers and ranchers are just so damn independent.

**Interviewer two** [00:16:12] Yeah.

**Interviewee one**[00:16:13] But but I mean, but I know there's I know there's more than a handful of operators out there like myself who would really like to have this information. And so, I think they would be, you know, I'm thinking initially it would be you can volunteer to be in this program a program, assuming a program gets developed. Do you volunteer to be in the program is how I would see it starting and then and then kind of take it from there. Because I mean the bad side of it is if the feed yards get my my data and my data doesn't stack up to everybody else's. Well, then on my they're gonna dock me on what they offer me, you know, so and so the producers aren't really wanting to invest in producing better quality cattle for the feedlot. They're not going to want to be part of this. They're just gonna want to be anonymous and you just buy my cattle sight unseen basically or at the sales or however they do it. But I mean, you know, they're not gonna know anything about the genetics or anything like that.

**Interviewer two** [00:17:28] Yeah.

**Interviewee one** [00:17:29] And past performance of the cattle.

**Interviewer two** [00:17:32] That makes a lot of sense. Do you think that's one of the main reasons why a large-scale traceability system hasn't been implemented yet?

**Interviewee one** [00:17:51] I think there's I think there's two reasons why, primary reasons why. One is just that it's new. And two for the people who remain independent and who tend to think, I can't even think of the word, those who who have more of a conspiracy mindset will will be slow to adopt. And so, the nice thing about Integrity Beef is we were getting paid a premium to become part of that project and so that was that was great. So, I think somewhere down the line to get the incentive for cattle producers to get into the program, there there's got to be some tangible benefit and tangible benefits will be dollars. There's got to be some tangible dollars for benefit me for going through this effort, because it is more effort. You know if I'm having to put in an electronic ear tag and put put in, you know, oh at a minimal the birthdate range of calves that they are. Some genetic information you know, what bulls were they bred to mixed herd that kind of stuff. Putting in some of that information. You know, there's cost to that. The thing that I'm looking at is trying to, like I said, maintain retain ownership of the feed yard and getting premiums. So, I think I've gotten hooked in with a feed yard now that will allow me to do that. But even, by the same token, if they were members of this, then they gather my information and have it electronically without having to reach me. And then third-party verification that yeah, he did feeding his feed didn't have any animal byproducts. Here's the vaccines that he used. And he didn't use any growth hormones or he did use growth hormones or whatever the case is, then it's documented in one place. And people can select from that.

**Interviewer two** [00:20:22] That that makes a lot of sense, and it seems like if you work hard, you should be able to get get a premium for the hard work you put in and the extra costs you incur.

**Interviewee one** [00:20:34] It does.

**Interviewer two** [00:20:34] So now I want you to think about a hypothetical large-scale traceable beef supply chain that's adopted by the beef industry. And we could imagine a successful voluntary program that cattle producers like yourself like. But we could also imagine a voluntary traceability program that cow-calf producers like yourself do not like. I would now like to ask you, what if the beef industry did adopt this large-scale traceability system. What would what would this system look like that is viewed favorably by cow-calf producers like yourself?

**Interviewee one**[00:21:06] But like I said, the ideal system will probably be managed by a third party, somebody that doesn't have a vested interest in one segment profiting more than the others. So, somebody that's kinda somewhat neutral. They would be the one touchpoint that we could all go to. I mean, they would be the keeper of all the data. In that we could go we would have access to that data for our own cattle. And then there's that as an aggregate as well. I would I would think it would require that somehow those producers would get a premium for participating in the program. So, I don't know how how that would be done for sure. But but that's the only way that you're going to get the large scale that you're thinking is that there's there's a benefit for me doing this.

**Interviewer two** [00:22:12] Absolutely. Yes. I mean, I understand that. So, you said a third party would be involved. Do you have any ideas of who that third party would be?

**Interviewee one** [00:22:22] I don't. I don't. I don't. You know. Well, since you're familiar with Oklahoma State, you know about their 45-day vac program.

**Interviewer two** [00:22:36] Yes, sir.

#### Theme K Attributes of an Effective Large-Scale Traceability Program

**Interviewee one** [00:22:37] Okay. And so. So, if it were universities that were working as a team to to set up those standards and say ok producers will work with all our producers within our area or state or whatever. But we will feed that information into a national database, you know, we will work with producers to help them try to gain information from this data as well. Or if you had a third party like I'm not familiar with the third-party verification folks, but I know there's like two or three players in the game. If one of them was to take that on or if it was just a nonprofit that was set up to do it, something in that fashion. And I would look at it being funded like with beef checkoff dollars or something like that. Or it could be that that producers pay a dollar a head or so much a head to participate in the program knowing on the back end they're gonna get a premium for their cattle.

**Interviewer two** [00:23:54] So that makes a lot of sense. And if the beef industry did adopt a traceable beef supply chain, what would what would it look like that isn't viewed favorably by cow cattle producers like yourself?

**Interviewee one** [00:24:08] I'm sorry ask me that one more time.

**Interviewer two** [00:24:09] Sorry. If the beef industry adopted like a large scale, traceable supply chain that was not viewed favorably by the cattle industry like yourself, what would it what would it look like?

#### Theme H Voluntary of Mandatory Traceability Program and Theme G Are Cow-Calf Producers Open to a Large-Scale Traceability Program

**Interviewee one** [00:24:20] That would probably be some kind of mandatory program. So, I mean, there's I can only be one kind of program to gather information. But making it mandatory was sure enough cause some people to buck up.

**Interviewer two** [00:24:37] Yeah, I can I can I can totally see that. And now I'm gonna ask you some more specific questions. What information about you and your operation do you feel comfortable sharing with others in a beef traceable supply chain beef traceability system?

#### Theme C Cow-Calf Producers Willingness to Share Information

**Interviewee one** [00:24:52] You know, I'm I'm I am comfortable with sharing all the information about my cattle. Okay. I mean, as far as as from the the purchase of the cattle, to herd protocol, to my calving records, to my sell records, to my feed records, to my sell records. I'm comfortable with sharing all that especially if it remains somewhat anonymous. You know, as far as as tax information, well then, I wouldn't be too hip on that idea. But, you know, so so sales falls into that area, but that's still something that would be useful. I mean, it doesn't it doesn't be of more benefit to me to know that, hey, this particular vertical market, whether it's, say, just Angus premium Angus tends to return more dollars per pound or per head or however you want to figure it out then across it like I'm doing right now with them. Terminal Charolais sires against my mixed herd. What seems to be working the best? I'd be willing to share you know my input cost as far as I'm paying this for for my grass, I'm paying this for hay, I'm paying this for feed. That kind of stuff.

**Interviewer two** [00:26:40] That makes a lot of sense. Do you believe a traceability system is necessary to manage disease outbreaks like mad cow disease or foot and mouth disease?

Theme I Concerns about a Traceability Program, Theme N Managing Food Disease Outbreaks, and Theme J Insurance Policy

**Interviewee one**[00:26:53] That is gonna be one of the things that's going to make it hard, because if a producer is afraid that he has some kind of disease on his place, he's not gonna really want you to know those cattle come from his place. Do I think it would be effective for or for that? Oh, gosh, yes. But would I want to be the ranchers that sent a cow in that tested positive for mad cow because then I know that they're gonna come direct to me and I'm gonna have to liquidate my herd and all this other kind of stuff. So, there is a risk factor there, but if there's some kind of insurance policy that they can also give us and that would be nice as well.

**Interviewer two** [00:27:34] So you think an insurance policy or some steps like that for cow-calf producers to lessen the risk of people coming blaming them for a disease outbreak would help more cow producers participate?

Theme J Insurance Policy

**Interviewee one** [00:27:47] Yeah. Oh, yeah. You know, if I if I know that, you know, if I even suspect that I've got some disease, I wouldn't want to register those cattle with with that with you. You know, I'm not saying I wouldn't but I wouldn't want to. So, but but if but if there's some kind of policy that says, OK, we're going to insure your cows for diseases. And you know, and it's not gonna be full 100 percent replacement cost but it's going to be 90 percent or much like an automobile or something like that. Well, then, yeah, I would I would look at sure enough purchasing that and that would help me sleep better at night because that's always a fear of mine. Because I went through anaplas with one herd and had to liquidate that herd, you know so that was. But but by the same token, you know, I I want to be a good steward, I'm not wanting to send contaminated cattle to somebody else for them to be their problems.

**Interviewer two** [00:28:58] So, yeah, I don't I don't blame you on that. It's kind of a double-edged sword there. And then if the beef industry did adopt a traceability system, do you think it should involve the USDA? And if so, how?

Theme M Role of the USDA

**Interviewee one** [00:29:22] You know, I'd prefer that there wasn't the USDA was not an integral integral part of it. Okay. But they could they could have access to the data. But as far as them knowing, knowing that I produce those cattle, I wouldn't want them to have that and I wouldn't want them to be in charge of implementing the program or setting the rules of a program or anything like that.

**Interviewer two** [00:29:59] OK. That makes sense. And if the beef industry did adopt traceability system, such as cattle producers felt compelled to participate in order to find buyers. Do you think that might alter the market power of cattle producers as compared to the buyers of live cattle?

**Interviewee one** [00:30:18] Ask me that one more time.

**Interviewer two** [00:30:19] Sorry. It's a long question. I know.

**Interviewee one** [00:30:22] I know but go ahead.

**Interviewer two** [00:30:23] If the beef industry adopted a traceability system such that cattle producers felt compelled to participate in order to find buyers, do you think that might alter the market power of cattle producers as compared to the buyers of live cattle?

**Interviewee one** [00:30:40] I'm still not understanding how you're what you're asking me, but ask me the first part again.

**Interviewer one** [00:30:50] Hi, interviewee one, this is interviewer one.

**Interviewee one** [00:30:52] Hey interviewer one. Yeah.

**Interviewer one** [00:30:56] I'll maybe try clarifying that question. I also had an additional question I wanted to ask you. I was eavesdropping on ya'll.

**Interviewee one** [00:31:02] Sure.

**Interviewer one** [00:31:04] What we're looking for there is I'm just I was concerned that more traceability we had in the beef system would require probably more coordination between ranchers and beef packers. And sometimes when we think more coordination, people think, well, that's going the way of the swine industry and broiler industry where you certainly have a lot more market power issues. And we didn't have a great way of asking the question is kind of our way of saying, when you think about traceability, are there any market power issues that that come to mind that worry you?

Theme P Traceability Altering Market Power

**Interviewee one**[00:31:49] You know interviewer one I can't I can't really answer that because I've always looked at it from my point of view as it would gain me market power.

**Interviewer one** [00:32:00] Okay. Yeah. Yeah.

**Interviewee one** [00:32:02] You know, but I'm sure I'm sure that it could hurt me as well. You know what I'm saying? If somebody had my information and they knew specifically this was me then then they could leverage that against me.

**Interviewer one** [00:32:20] Right. Right. Would you would you say would you have any qualms about entering long term relationships say with one specific meatpacker and just setting prices with them and not really having much of an open market?

**Interviewee one** [00:32:39] You know, if I if I thought I was getting a premium I would. The whole reason why I'm in I am in Integrity Beef is because I'm a small producer so whenever I don't know the auction houses, I don't have a network, old buddies, or anything like that. So, whenever I take my cattle to town and I just got back into it within the last 10 years. So, there's not a name really. I don't have I'm not taking the name to the sale I'm just taking some cattle. And and and repeatedly I was not getting what I thought was comparable price paid for my cattle.

**Interviewer one** [00:33:29] At the sale barn?

**Interviewee one** [00:33:32] At the sale barn. OK. And so, the whole purpose I got into Integrity Beef was that, OK, you may oh screw me over but you're not gonna be able to do that with 100 producers. Oh, and so that's what integrity was representing. Plus, the fact that whenever I got in, they co-mingled cattle. And so, if I didn't have a pot load, I could still mix in with other comparable cattle and make that pot load and hopefully get a premium for being a pot load.



**Interviewer one** [00:34:08] In the Integrity Beef program?

**Interviewee one** [00:34:11] In the Integrity Beef program.

**Interviewer one** [00:34:13] That makes sense.

**Interviewee one** [00:34:14] And so and so that was my main motivation into getting in Integrity Beef program. OK. I am pulling out of Integrity Beef program. I will maintain my membership. But this will be the last year I will market through them.

**Interviewer one** [00:34:33] Can I ask you why?

Theme BB McDonald's Project and Integrity Beef

**Interviewee one** [00:34:33] That's fine. I'll I'll because you know that because because integrity to me is not trying to find. We're not we're not becoming a supplier for a packer. You know, I'm saying I'm thinking that that is the most profitable, sustainable for me. If I can lock in a price, that is a good price. OK. It doesn't have to be above everybody else's, but it has to be a good price. I'm getting paid because I'm willing to get being paid for all my health protocol on my record keeping all everything that I'm doing for you. You're going to have that so you got to know from year to year how my cattle perform. And so, you can base my price on that. But now, like I said, I've hooked up with another guy who's got a feedlot out in western Oklahoma that he markets primarily to the Japanese market and international market. And so, I'm kinda got into him this year I'm running some cattle for him some cows for him. But then I'm looking to try to start retaining ownership in his feedlot with my cattle. That's what I was looking for Integrity to grow into. I don't think they're ever gonna do it.

**Interviewer one** [00:36:05] So I'm just curious. What do you know about the Japanese market? What type of beef are they looking for?

**Interviewee one** [00:36:12] I couldn't tell you enough about that. OK. That would be and I hesitate to tell you who I'm hooked up with because I don't.

**Interviewer one** [00:36:20] I get it. You don't have to.

**Interviewee one** [00:36:22] I don't have his permission to do that.

**Interviewer one** [00:36:24] Understandable.

Theme BB McDonald's Project and Integrity Beef

**Interviewee one** [00:36:24] But but, you know, I just I have looked the thing of it is is like I said it's usually size and unless you can put a pen together. Then then it's hard to get in there. And that's and that's way too many dollars for me to have hanging it out there. You know and so that's the deal in this deal. I'm looking for him to do all the ???morphine???, hedging, and covering all that. It's pretty much a straight up business deal for me. And he's more than eager to buy whatever percentage of it that I'm willing to sell.

**Interviewer one** [00:37:12] Right. Well, I have one other question for you. I kinda overheard you mentioned some third-party certifications.

**Interviewee one** [00:37:21] Yes.

**Interviewer one** [00:37:22] I don't know and I'm just now getting into this traceability thing. There's so much I don't know. What do you know about these? Do you know if a number of people actually using them or do you just know they exist than and that's all?

**Interviewee one** [00:37:37] Both. I don't know how many people use them, but if you're selling GAP and I don't know the acronym to all of them. But if you're GAP or naturalized natural beef, grass fed beef not so much I don't think. But any beef that doesn't have any hormones or animal byproducts have been fed to them or any of that that that they had to come out and actually certify.

**Interviewer one** [00:38:10] And that's probably those USDA programs where you market.

**Interviewee one** [00:38:13] I don't know I don't know I don't think its USDA. OK. I couldn't tell you for sure, Robert Wells there at Integrity could give you more information about it. I know that Integrity is looking at doing that. They've always tried to find little niches to add value to our cattle. Ok. And that's one of the things that they're looking at right now. And just from what an NRI employee told me, I think there's like two two major ones. But but I will emphasize to you for for to work, in my mind, it needs to be a third-party nonprofit and they handle it all from both ends from our end and from the packers' end. And so, everybody has to feed and put the information back into the system. Otherwise, it doesn't seem viable to me.

**Interviewer one** [00:39:09] Yeah, I think we've heard that from. A few other people we talked to and I'm wondering if that's something one thing this is going to really come up consistently. It will be interesting to see.

**Interviewee one** Yeah it will be.

**Interviewer one** [00:39:21] Well, that's all we have. Interviewer two will get your mailing address and we'll. Yeah, go ahead, interviewer two. Take it over.

**Interviewer two** [00:39:27] I just had one last question for you. Do you think consumers care if the beef industry adopts a traceability system?

Theme O Do Consumers Care About Traceability

**Interviewee one** [00:39:36] Definitely do.

**Interviewer two** [00:39:37] Okay. Why do you say that?

**Interviewee one** [00:39:41] There's too many yuppies in the cities.

**Interviewer two** [00:39:44] Yeah, I can I can see that

Theme O Do Consumers care About Traceability and Theme U Coronavirus Effects on a Traceability Program

**Interviewee one** [00:39:46] And that's a, you know, I've got a wife and a sister in law that buy organic simply because in their minds it's better. And and and you can't argue with that. You can say, well, it may not have the nutritional value even. But by the same token, you know, everyone I know, they try to choose non antibiotic beef or meat and no hormones and that kind of stuff. So, I don't see it going any place else. Unless covid thing I don't know may set it back a little ways, but eventually I think it's gonna take over. You know, my biggest fear is that beef gets replaced with a meat substitute. So.

**Interviewer two** [00:40:32] Yeah, hopefully hopefully that doesn't happen.

**Interviewee one** [00:40:37] It's not going to happen in my lifetime but it will eventually probably.

**Interviewer two** [00:40:40] Yeah, I can I can see that. Well, that completes the questions we have. Do you do you have any additional comments you like to add or do you suggest any other questions?

**Interviewee one** [00:40:50] I don't I just just gave you my last comment.

**Interviewer two** [00:40:55] Do you have any, um, suggestion questions we didn't ask that you think we should ask?

**Interviewee one** [00:41:02] You know I'm I don't know is this purely research or y'all trying to put a program together?

**Interviewer two** [00:41:10] I am writing my master's thesis on beef traceability.

**Interviewee one** [00:41:14] It is purely research. We're not doing any consulting, anything for profit.

**Interviewee one** [00:41:19] I'm not saying for profit. But I mean, does that like, you know, I got back to the vac 45 program and I wouldn't, you know, it would be great if Oklahoma State would kinda get it going. You know, I'm saying just here in Oklahoma or something like that just saying, you know, because I know there's more producers out there like me. Okay. And I know there's feed yards out there that would pay for that information. And so, you know, you can finally get the ball rolling or something like that that'll be alright with me.

**Interviewer one** [00:41:54] Okay that's good to know. Very good to know.

**Interviewee one** [00:41:56] All right. All right. Thanks for your time.

**Interviewer two** [00:41:59] Okay. One last thing. We do want to send you \$100.

**Interviewee one** [00:42:03] Oh, God. Yeah, I want that part.

**Interviewer two** [00:42:04] Yeah. Yeah. Yeah. So, you can even don't even have to write that off in your taxes. We just need our mailing address for you.

### **Interview of Interviewee Two**

**Interviewer one** [00:00:51] Hello. Hello, is this interviewee two?

**Interviewee one** [00:00:54] Yes, it is. Hi, interviewer two, this is interviewer one, the professor of agriculture economics. And with me, also a young man who e-mailed you, interviewer two. Thanks so much for letting us interview.

**Interviewer two** [00:01:07] No worries, however, I can be helpful.

**Interviewee one** [00:01:10] Well, it's so, you know, no one thing we're gonna do. Well, we'll start interviewing in a bit, but there are some things that we're familiar with with cattle. I used to work on a purebred Angus farm when I was younger and I've done some research in the cattle

industry. And I think interviewer two kind of same way, you know, some things, but not everything.

**Interviewer two** [00:01:31] I know a little bit. I grew up I'm from originally from Alabama. I grew up on a row crop farm, so I'm familiar with the row crops. I do know a little bit about cattle.

**Interviewee two** [00:01:41] Excellent. Well, anybody claims they know everything about cattle, they're lying. No, we're fine with that.

**Interviewer one** [00:01:48] But I was gonna say but I do know there's some things we don't know. For instance, I was just looking at your farm's web site and I didn't realize that there were EPD for marbling and grids scoring now.

**Interviewee two** [00:01:59] Yeah, that's awesome.

**Interviewer one** [00:02:00] So, you know, there's a lot of there's a lot of things in the cattle industry that I'm just not all that aware of.

**Interviewee two** [00:02:07] And so things are really changing. It's cool.

**Interviewer one** [00:03:37] Yeah. Well, good. Well, do you want to go ahead, start?

**Interviewee two** [00:05:14] OK. Sounds good.

**Interviewer one** [00:05:16] OK. And again, I don't I don't know if you saw this in the e-mail, but, you know, we're going to we're recording this interview right now. But once the audio recording is done, we're going to take the audio file and we'll make a written transcript of it, at which point any any personal information will be removed. You'll just be identified by a number. And we'll leave and provide you a copy of the written transcripts that you're welcome to review and make any changes you want. And you know, when it comes to publish anything, we never say your name. We never say the name of your farm. If we do include something, it's like a direct quote from you. It's just a small excerpt. And it certainly would not identify you in any way. Does that make sense?

**Interviewee two** [00:06:05] Sure that's fine.

**Interviewer one** [00:06:06] OK. Good. And when we're done, we can also get your address and we happily send you a hundred dollars to thank you for your time.

**Interviewee two** [00:06:15] Well, that'll be fine.

**Interviewer one** [00:06:17] And by the way, don't be a thing in it, but we'll put a self-addressed, stamped envelope in it. We'll have a receipt there that you'll just need to sign and the mail right back to us. If you could. That's the university's way of making sure I'm not keeping it for myself.

**Interviewee two** [00:06:30] Oh, no problem.

**Interviewer one** [00:06:34] OK, well, good. So what we're mainly going to be talking about today is beef and and traceability. And I know with the pilot program there was probably there was a lot more than just traceability. But this is a this is a research project that interviewer two is doing his thesis on. And it may and it mainly concerns traceability. And what our main objective is, is trying to interview people like you to figure out what kind of traceability program you would view favorably. What kind of traceability program would be received with open arms by cow-calf producers like you? And what we're going to do is I'm going to I'm going to read you a

quick definition of what we mean by traceability just to make sure we're on the same page to begin with. OK. And then there's going to be 13 questions and they're all open-ended questions. So, you know, we're just going to throw out a question and you talk for as little or however long you want. Sometimes we'll follow it up with some other questions. Sometime we don't. OK. OK. So, when we talk it about a traceable beef supply chain. What we're talking about is one where cattle and its beef can be traced from the farms on which the cattle are raised throughout the beef supply chain until the point of consumption. Now, we're not saying that in a traceable beef supply chain every single hamburger patty can be traced back to the individual farms from which it came from. That would you know, that's probably a little too much to ask. But what we are saying is that some information like any one beef patty, it could be traced back to at least a collection of farms. So where it might have come from. And more importantly, in addition to it just being traceable, we're talking about a system where information like farm production practices is passed down the supply chain from producers to meat packers to retailers and information, things like carcass quality is also passed up the supply chain from meat packers and retailers back to cattle producers like you. And so, you know where things can be traced, people are cooperating, there's exchanging information. And and this traceable system it could be something that works just through open markets. It could be something that works through vertical integration or something in between. We're not saying traceability has to be a certain type of market structure. Do you know what I mean by that?

**Interviewee two** [00:09:21] Well, not really, so my my but my initial question for you is to not use the word mandatory or voluntary, which one would that be?

**Interviewer one** [00:09:30] It would. You know, that's a good question, we haven't said so explicitly whether mandatory, voluntary. But I think it would be voluntary.

Theme H Voluntary or Mandatory Traceability Program

**Interviewee two** [00:09:39] And voluntary then says to me that it would be market driven and I would have a benefit whether that is financial or data wise.

**Interviewer one** [00:09:51] Yes, we yeah, we're looking at something that cow-calf producers say. I want to be a part of this. I volunteer. And they're presumably doing it because it benefits. They'll not because they're mandated by a law or something like that. I'm glad you said that. A good thing. We should have to make that up front. Yeah. Yeah. And of course it could. And you know, when I said like open markets or vertical integration, I guess I was trying to say it could be a thing where like cattle sold at auction, but it could be just person to person or it could be through contracts, something like that. I guess I was trying to separate traceability and controversies about market power, probably.

**Interviewee two** [00:10:41] OK, I understand. OK. And then the second question I have is just to verify that this is not about disease traceability. This is about market access and some sort of a program that would give more information to the end user as well as back to me.

**Interviewer one** [00:11:00] Yes and no. We are going there will be a question about whether you believe traceability is necessary for managing disease, something like that. OK.

**Interviewee two** [00:11:18] Disease traceability comes first, in my opinion, and then secondary. If we can make a marketing program off of that, I think that we should make it that people could do that. So the technology that we use needs to be, you know, available in such a way that we can make marketing programs from it. But to me, the bottom line, the first step is it's got to work for our disease traceability.

**Interviewer one** [00:11:44] OK. Got you. Good. I'm going to bring that back up around question 6 and 7 and we'll go through that in more detail.

**Interviewer one** [00:11:54] OK, so the first six questions are mainly about just the pilot program itself and then questions seven through 13 will be more questions just about traceability in general. So, the first question is, what did you like about the pilot project compared to the way you might normally sell cattle elsewhere? Feel free to tell me if the question doesn't seem worded right for you, particularly if you don't understand.

#### Theme A Information Sharing

**Interviewee two** [00:12:32] So so for us, we have fed cattle for a long time and then and retained ownership close to the end. So we have gotten our data back before. So, this was not an opportunity for us to get data back that we haven't already gotten. We already have that. But what that pilot project provided for us was the ability to compare to other people. The final report was interesting just to see kind of where we are as far as I guess it didn't really ask us full cost of production. But, you know, whether we're a low cost producer or a high cost producer, where we sit in that whole scheme as well as where we fit, then at the end as far as how much profit that was made. And I thought that was an interesting part of it. We already keep the bulk of those records that they requested. That was not anything new for us. But the ability, though, to do that as a group apply that to sustainability that was really valuable. So just looking to see efficiencies and know how we do animal welfare, that kind of thing as a group, and then to apply that to sustainability was tremendously valuable.

**Interviewer one** [00:13:58] So tell me a little bit more about that. Could you maybe find us an example of something you learned that?

**Interviewee two** [00:14:06] Well, so I don't have any data in front of me specifically, and it's been a little while since they presented it, but it was interesting to me that there are some producers who have not given vaccines and that is just a basic thing for us as a purebred operation. And so, we've been vaccinating for just about everything that our vet has recommended for a long time. It was just interesting to see that there are people that would like that advice and would like that information. And then when we were able to put all that information together in aggregate and teach each other, I think that makes an impact when you talk about animal welfare as far as sustainability. I think that we can make tremendous strides. And just by helping cattle be healthier to do better in the feed yard by sharing information about vaccinations, I think can really be helpful.

**Interviewer one** [00:15:06] When you talk about sustainability, what exactly what exactly do you think of when you think of sustainability?

#### Theme AA Sustainability

**Interviewee two** [00:15:13] That's a great question. So, remember, I'm an active member in beef organizations. The US roundtable definition given is, you know, multi-pronged. So, it's take care of the land, take care of the animals, take care of the people, and make money. So in other words, you've got to have good animal welfare. You've got to have good employee programs as well as make sure that you're taking care of the environment and making a profit every year. So that's that's kind of our foundation at our ranch to make sure that we've got all of those pillars paying attention to.

**Interviewer one** [00:15:54] Right. OK. Was there anything you didn't like about the pilot program?

**Interviewee two** [00:16:01] Well, like I say, it didn't really provide me any tremendous value in my cattle over what we have gotten in the past, you know, but I felt like that it was worth doing because it was it was a positive informational experience. I think it was really important to get that that data out there and get the information out there. And it helped our family to see where we rank.

**Interviewer one** [00:16:27] How did you feel about sharing information about your operation and your cattle with others in the pilot program?

Theme C Cow-Calf Producers Willingness to Share Information and Theme D Steps Taken to Make Cow-Calf Producers Comfortable Sharing Information

**Interviewee two** [00:16:34] So for the most part, that was anonymous and I appreciate that because I do think that sometimes cattle ranchers can become very competitive and also very private with their information. So I feel like doing it in an anonymous and aggregated way was really good. Now we were and I don't know that, you know, this may be something that you pull out of the transcripts eventually, but we were targeted in a brochure as an example. At one point and there's pros and cons to using a name, for an example, because the other person that was called out was had lots of room for improvement. And our cattle looked pretty impressive in that comparison. And I I just don't know that that is of value to show, you know, that kind of comparisons in that situation a public way. But I do think that it was interesting when we got the brochure back that was very anonymous. I thought that was really a good comparison, a good experience for us to see where we fit in there.

**Interviewer one** [00:17:47] OK. That's very useful. What information passed up the supply chain to you did you particularly find useful, I know you may have kind of answered you probably kind of answered this earlier and sometimes these questions are like this. But so if you kind of feel like you've already answered it, feel free to say. But if you think of something else, you can say that as well. And what information maybe did you not find useful?

**Interviewee two** [00:18:13] So I think that it's really valuable for cattle ranchers, whether they're a commercial producer or purebred producer, for anybody to feed their own cattle and get that carcass data information back. Very few of us in my neck of the woods do that. And I feel like that direct link back is extremely valuable to see really where we rate as far as how our cattle are doing on the rail. We've been selling our cattle in a grid for a number of years now. So it really wasn't any surprise when they when the data came back for us. It was very much in line with how they'd been doing, you know, previously. So that was good to have that reinforcement that our information is, you know, the same every year and that we've been doing well with progress. But I feel like that is a tremendous value for any just cattle producer out there, that to be able to see that the carcass information of your cattle and what you're selecting in order for your breeding program is so key.

**Interviewer one** [00:19:19] Yeah, I guess you can't have Carcass EPD or Group Price EPD without that information it would be impossible, right?

Theme A Information Sharing

**Interviewee two** [00:19:27] That's true. Well, they do. A lot of that is based on genetics. So, the EPD are based on genetics as well as like a DNA sample. And that kind of thing. And so, information that's been reported through the years and all of that as well and through ultrasound. So that's really key. But I think there's so many people that personally I sell registered bulls to that really don't worry so much about carcass because they sell their calves at weaning time. But

if they could see the difference between a set of calves that has been bred to a carcass bull versus a set of calves that's been bred, you know, to a lower carcass bull, maybe a cheaper bull. I think they would really it makes a tremendous impact when they realize the difference at the end of the line.

**Interviewer one** [00:20:16] Was there any information that was passed to you that you didn't find useful?

**Interviewee two** [00:20:24] Oh, you know, I don't know that I could say it wasn't useful, it just wasn't top of the list what I needed. Interesting.

**Interviewer one** [00:20:37] Well, you may have kinda answered this before, but see if something else comes to mind. What steps were taken to make you feel comfortable sharing information about your operation? You've already said anonymity. But what were the other things about the pilot program that made you feel comfortable submitting your information?

#### Theme D Steps Taken to Make Cow-Calf Producers Comfortable Sharing Information

**Interviewee two** [00:21:00] Yeah, I was very impressed with the project managers and specifically Noble when they were handling the data and talking to us and kind of presenting what they were going to do. It was very well handled, very professional. I felt total confidence that my data would be protected and if any information was to be put out, they asked that in advance and made sure that I was OK with that and had approved that.

**Interviewer one** [00:21:32] And you would probably you probably knew of the Noble Research Institute before then. And so you knew their reputation. And then when you went and listened to them, they seemed professional and all that. It was mainly the Noble Research Institute.

**Interviewee two** [00:21:50] Yeah, pretty much that's who my contact was as well as the fellows at the feed yard, and I totally trust them, know them. Now I never did attend a meeting that was not offered to the non-integrity beef people. So I did not get a chance to attend a meeting with them. But our phone calls or face to face conversations at other meetings and such, I had total confidence.

**Interviewer one** [00:22:19] So if the pilot program was made permanent, and suppose they did it. You know, every year for a number of years from now. Would you want to continue participating in it?

#### Theme E Will Cow-Calf Producers Continue to Participate in the Integrity Beef Sustainability Pilot Project?

**Interviewee two** [00:22:32] We would consider that I think participation would be dependent on the value that comes back to me. So, the that data value is not as high for me. The way it would have to be proved me that there would be a financial value because like I say, we do feed our own cattle and typically we see a really good profit at the end of everything because our cattle grade very well. So I would have to know that there was a premium being paid early on for me to do the work of gathering that data.

**Interviewer one** [00:23:12] Gotcha. And this is the last question about the pilot program in particular. Then we go on to traceability in general. What aspects of the pilot program would you recommend changing for it to be seen favorable by other cow-calf producers, including yourself?



**Interviewee two** [00:23:30] Good question. Hang On. Yeah. I don't know. As far as a situation that would be different to encourage more cow calf producers, I think if it is expanded, I think it could be very good for other cow-calf producers as it is right off the top my head. I cannot think of something that I think would make it better for an extended program.

**Interviewer one** [00:24:05] Think about the cattle industry as a whole. Do you think the cattle industry, the beef cattle industry in the U.S. will begin adopting traceable beef supply chain on a large scale? And I guess here we're thinking voluntary, so we're not asking whether you believe the government will mandate it. We are asking whether you think the industry itself will begin going that way on a large scale.

#### Theme G Are Cow-Calf Producers Open to a Large-Scale Traceability Program?

**Interviewee two** [00:24:33] On a large scale, yes, I think that probably will happen on a large scale. I think it will have to be slow and it'll have to be through a variety of programs so that cattle ranchers feel they have a choice. As far as which program they participate in and at what level. I feel like that it will need to be, you know, some sort of a branded beef program that directly benefits each individual cattle rancher. So I feel like it has already started. So that but I think it will probably become quite a bit more robust. And, you know, some cattle ranchers will be 100 percent on board with answering every single question, if they get paid for that information. There will be some cattle ranchers who will say, I will never participate in that program no matter what you pay me. And so I think the bulk of the people will be somewhere in between those two. But I think if they can see a profit, they will find more and more people that will be willing to answer all those kind of questions.

**Interviewer one** [00:25:43] Now, let's suppose the beef industry does adopt a largely traceable beef supply, that this was voluntary, that it wasn't mandated by government. And, you know, and suppose it's like you said, there's a number of different programs people could participate in. We could imagine some programs that cattle producers like. But, you know, other programs maybe cattle producers tried once and they don't like it. What we want to do now is ask you what you think would make a successful or unsuccessful program. From the standpoint of the cattle industry as a whole, not. And that includes an operation like yours, but also benefits the whole industry. And so the first question about that was. If the beef industry adopted a traceable supply chain on a large scale, that was viewed favorably by the cattle industry. And so, cow-calf producers like you are increasingly getting in it so are feedlots. What would that system look like? What would be the attributes of that system?

#### Theme K Attributes of an Effective Large-Scale Traceability Program

**Interviewee two** [00:26:55] I think that it would be a tremendous positive to hear that we could not only share data up and down the value chain, but also across the value chain so that if there are improvements that can be shared among all cattle ranchers, that if that data could at least be somehow offered in aggregate, you know, kind of like the pilot project, that if it could show each producer or each feed yard where they rank among their peers. I think that would be a tremendous positive and that would be good information. Now, do I see that happening anytime soon? I really don't. Not on a very large scale, but maybe in my lifetime it will. That would be, I think, a tremendous positive that would assist the entire industry. But that's going to be a tough one to do.

**Interviewer one** [00:27:51] Kind of alluding back to something you talked about earlier. Do you think a successful programs for the industry as a whole would need to include organizations like the Noble Research Institute, or do you think it could also work just strictly with private companies working with each other?

## Theme G Are Cow-Calf Producers Open to a Large-Scale Traceability Program? and Theme I Cow-Calf Producers Concerns about a Traceability Program

**Interviewee two** [00:28:15] So I think. Yeah. Good question. I think that there will be some people who will be uncomfortable with organizations like Noble being involved. And so, I don't think that every single program will evolve to include an NGO (non-government organization). I think probably there will be some that will be purely commercial, purely profit, you know, purely commercial, and that there are certain a certain kind of person that will be interested in that. There will be other people that are interested in the research aspect of it and might be willing to take a little less of a premium in order to be provided with the research aspect. And to me then that's where other non-government organizations and Noble Research Institute and places like that and organizations like that would be applicable. Let me go back to the previous question. One other thing that I think we need to point out, that if a program like this would come about, I think one key thing will be really vital in the success of this program, and that is protecting liability. So if a you know, a food recall happens, it will not go back clear back to the producer with a lawsuit issue. I think that is one big fear of cattle ranchers is if something happens down the line where they have not had control of that animal for many months, and then something happens and somebody gets sick or dies or whatever. How far back the chain will liability go then just because they have data? Where is the liability protection? So I think if we're going to have those questions answered and cattle ranchers are, you know, interested in participating in sharing data and sharing information, they're going to have to have some liability protection for that.

**Interviewer one** [00:30:29] So this is this is a bit of a side. What do you think? Is that one of the main reasons a lot of cattle producers were against mandatory traceability?

## Theme I Cow-Calf Producers Concerns about a Traceability Program

**Interviewee two** [00:30:39] I think that is one of the big pillars of that argument. Yes, I really do. I think they're totally concerned that, you know, at this stage you can't really trace back a pen. You buy a pen of one hundred head at the sale barn. They might come from fifty-seven different farms. And so you're not going to be able to trace back. And there just is no ability to say this happened at this location. And so I think that the fear is that something that they've done or not done, not that they're doing it wrong. It's just that it could be misconstrued and then able to, you know, become in a lawsuit situation. So I do think that's very, very key to the whole argument about mandatory traceability.

**Interviewer one** [00:31:34] Let me bring us some you were talking about earlier, so you said earlier like disease prevention is like the number one thing or benefit of traceability. Is that right?

## Theme H Voluntary or Mandatory Traceability Program

**Interviewee two** [00:31:47] Not exactly. So for me, I think that the key is that disease traceability is the key program. And then if we can use technology like the good E.I.D. tags and good tag readers, if we can standardize that, then if we can make a good robust disease traceability program, then we could use the same ear tags and same technology to make a marketing program, which is what I believe you're talking about. I think disease traceability is we've got to do that. We have to do that. That needs to be mandatory a disease traceability program. But it still should be everybody's choice if they want to answer the questions like what you're talking about in order to get involved into a marketing program.

**Interviewer one** [00:32:35] Gotcha. So, when you say disease traceability, you talk about like cattle come into feedlots. They have ear tags. And we know that cattle get sick at some point. We know how it was treated and we know what happened to it.

#### Theme N Managing Food Disease Outbreaks

**Interviewee two** [00:32:51] So actually even worse than that. So disease traceability for me is what happens if foot and mouth returns to the United States. So one animal is shipped from the farm and stops at a way station is put on a truck with multiple different ranches and then goes to the sale barn is then held in a sale barn for a couple of days until that truck is filled to go to a feed yard. If that one animal is a carrier of foot and mouth disease, they have now impacted and probably infected hundreds, if not thousands of head of cattle. And today, the way our system stands, we would shut down the whole movement of cattle, live cattle and beef. And there would be depopulating of herds all over the place. That would be truly unnecessary at this stage because we just don't know where that has gone, so foot and mouth disease is absolutely a tremendous fear in America. That is that would shut everything down. But if those cattle had any I.D. tag and we knew exactly the animals that that one calf had been with, then only those ranches or only that one end point would have to be shut down. Let's say even that animal was in the sale barn. We would know every animal there was in the sale barn that day and every animal that had gone through the ring since that animal went through the ring. And so every animal that possibly could have been infected would then probably be depopulated and the places around would probably be shut down for that animal. But guess what? I'm still able to sell cattle because maybe my cattle weren't in that situation at that time. So, in order to be able to have a robust disease traceability program for these catastrophic diseases that will absolutely decimate the American beef supply. We have got to have a really good E.I.D. Program that knows where all animals are at all time.

**Interviewer one** [00:35:11] And we're not anywhere remotely close to them right now. Right.

**Interviewee two** [00:35:15] No, we're not. If we really have a traceability, not an EID program, it's that little metal clip that goes in their ear. So let's just say an animal is found to have to be a carrier of a disease. We can then trace back all the way back to the producer, but then we have to slowly work forward. The producer says, I sold it to this guy. This guy says, I put it on this truck. That truck says, I took it to this place. And then slowly then can disperse out which cattle were infected and which cattle were nearby. But at that point, then it's so slow that we've spread it. It's already all over the place. And in the meantime, they've shut everything down.

**Interviewer one** [00:35:59] Yeah. You know, last year I attended a seminar. What about we have a lot of our professor. She does research on what to do. If foot, mouth and I was, you know, it's, I had no idea how big operation it would be.

**Interviewee two** [00:36:14] Yep. So I have attended a couple of those mock exercises in Kansas. Yeah, and they are frightening. It is amazing some of the stuff as a cattle producer. So that's how the disease traceability program is different from a marketing traceability. But I do believe that the technology, if we get a disease traceability up and running, that that utilizes those EID tags, then we've already got an EID tag in that animal's ear. It's just a matter of utilizing that EID tag to trace back to information for you all. Would the rancher be willing to answer those questions?

**Interviewer one** What information about you and your operation would you feel comfortable sharing with others in a beef traceability system?

#### Theme C Cow-Calf Producers Willingness to Share Information and Theme O Do Consumers Care About Traceability?

**Interviewee two** [00:38:53] So yes and no, I would not be comfortable sharing information about where the cattle are on my ranch. I would be comfortable saying this pen of calves was sold and went this direction. I would not want to be able to trace back which cows are at which location on my ranch, and I would not be interested in identifying all of the different pastures and land resources that we utilize. I just don't feel comfortable at this point right now. I think that is a question of who owns that data and how do they protect it. If an animal rights activists got a hold of that and we're able to say there are ten thousand cows in this 50-mile radius, let's go there and cause some trouble. I don't want that. So I would not be comfortable with that kind of identification, but I am very comfortable saying this is where they went after my place. Once they actually entered commerce, that is, I'm very comfortable with giving that location information. In addition, I am comfortable answering questions about how we handle our cattle and how well trained our people are. Before the pilot program, we had to be BQA certified. We already were that was not a worry whatsoever. Everybody on my ranch is individually BQA certified including my brand new daughter in law who doesn't work on the ranch very often. Everybody has gone through the training period, and that's the way it goes on our place. It's not just about the learning how to do things, but it's also just getting more information to people. BQA is an absolutely spectacular program that gets people more information about how things are done. So, when we teach her, she helps us vaccinate, you know, when we're going to grass with our baby calves and our cows. So I can tell her two or three times exactly how to give us subcutaneous injection. But when they tell you that in BQA it's this. So and sometimes there's things that I don't think about that I need to tell my crew and BQA tells it, it covers everything. So I'm very comfortable sharing that we have completed those trainings, all of that kind of information. I believe that the consumer wants to know that. That we have been certified as good animal handling, you know, that we that we do a good job with that. I think that's really important to the consumers.

**Interviewer one** [00:41:54] I think that says I will skip to that question. But that question, do you think consumers care if the beef industry adopts a traceability system?

Theme O Do Consumers Care About Traceability?

**Interviewee two** [00:42:08] Yeah, I don't think they care about the system. I don't think they really want to know the nuts and bolts of the system. But if they could go to a case, to a meat case and either open up their phone and scan a QR code or scan, you know, something on the package that says, you know, more information about where that animal came from or specifically just more information about animal handling practices that have been certified for this program. I think they'd be very happy to do that. I think they would really like that

**Interviewer one** [00:42:41] Do you think there's like one or two things in particular consumers are looking for would want to know about where the animals came from? Or is it just more of a general concern?

Theme O Do Consumers Care About Traceability? and Theme U Coronavirus Effects on a Traceability Program

**Interviewee two** [00:42:53] I think it's probably just more of a general concern. The halo effect of this cow was raised well. Then they just assume that other things are done right too. But I think that if we're gonna get that and really, truly inform our consumers right. I think we have to go through certification for that stuff. I think it has to be more than just this is a happy cow, right. We'll have to prove that we've done a good job with those happy cows. I think consumers like that. Will they pay more for it? That is an important question. I don't know, because what you've seen during this quarantine is any ground beef, they want ground beef and they don't care what label is on it. They're buying ground beef. So, I think when push comes to shove, they just want

good safe meat. But I do my thinking is from a rancher's perspective, I want them to feel good about wanting that ground beef. I want them to say, yeah, I feel this program here, I always buy this label because I feel good about that label. I know the ranchers take good care of their cattle there.

**Interviewer one** [00:44:10] As far as traceability, like if we did have a number of systems where, you know, let's say more than half of the beef supply chain was traceable for it to be successful. Do you think the USDA needs to be involved or should be involved or just kind of. What do you think about the role of the USDA, if any, in traceability programs?

Theme M Role of the USDA

**Interviewee two** [00:44:35] I think the USDA needs to be involved in making sure that the programs that are created are or these companies that are created fit into whatever certification program that they're creating. So it's not just anybody can claim whatever they want to claim. They can claim that its grass finished because the last 10 days they lived on grass that, you know, they need to make sure that those definitions are clarified and that that is a standard that has to be met. But I don't want those programs to be each individual marketing program. I do not want the government involved. I think they need to define what the terminology is like they have with organic. What does organic mean? What is an organic program? That is definitely defined by USDA. So that is that is my expectation of them.

**Interviewer one** [00:45:34] That makes sense. And so the last one it has to do with market power issues if the beef industry started adopting an extensive traceability systems. And suppose we got to a situation where cattle producers felt like they had to participate in a traceability system in order to find buyers just because it got so popular that cattle buyers from, I don't know, from meat packers down the feedlots. I guess we're mainly thinking about meat packers, they only want cattle that was in a traceability system. How do you think that might alter the market power of cattle producers as compared to the buyers of live cattle?

Theme P Traceability Altering Market Power

**Interviewee two** [00:46:24] Yes. I think it would actually empower those that are willing to get involved. And it would take power away from those who are not. And so that I think is the big reason why there is a subset of cattle ranchers right now that they really want to go back to the old marketing ways. They really just want to go back to pounds. They want to take the power away from some of these programs. But I think by making it a voluntary program, I think that it's very key then that I can choose if I can make more money doing it. I think I better have the right to get involved in that program. But I do think that it probably just like we have today. There's so many cattle sold on the grid now that it is difficult for price discovery out in the open. So I think it will change things. Will it be for the better? I think so. But I also think that we have to find a way to make sure that while confidentiality and contracts are protected, that there is still enough public information out there to be able to do a good job of making sure that we can all market our cattle.

**Interviewer one** [00:47:45] Right. That makes sense.

**Interviewee two** [00:47:46] But I definitely do not want to return to the old days. I definitely do not. I've worked very hard to put my cattle at the top of that premium list. You know, we go backward that I'm getting the same kind of money that the guy that has done no work to get his cattle through at market. So. So absolutely not. I don't want to go back to that.

**Interviewer one** [00:48:08] And that makes sense. You know, just like interviewer two or I don't want every degree to have the same value. The point that that completes all the questions, we have prepared. Is there anything else you'd like to add or any other questions you think we should be asking that we haven't?

#### Theme X Finding a Standard Ear Tag

**Interviewee two** [00:48:26] No, that's. It's really very good. I think that if you want to get more information about the disease traceability program, I really encourage you to talk to, you know, either your state guys that are that are doing that either through the Department of AG or through Oklahoma State. And just to understand, you know, the foundation, because they're really struggling. As far as nationwide, finding a standard ear tag to use, that has been really painful. Yes, there is a better ear tag. That is a little bit more expensive, but realistically not a whole lot more expensive. But it there's other ones, though, that are that have already been in use and are already being used that are the low frequency tags. And they've got those readers out and about. Everybody can read those tags. Well, now these better tags, there's some people that have invested in that reader. It's a better situation. We can read cattle coming through the sale barn in groups instead of one by one. I mean, it's it we've got to find a standard ear tag. We've got to standardize that. And that is a huge part. I do think, though, that the marketing traceability program can help us pick a better ear tag. So if I get paid to have the better ear tag in my in my calves ears, then that's guess which one I'm going to pick. I going to pick that one. But if it's just the bare bones one by one reading them, I'm probably gonna go with the cheaper one right. Though, if I have an incentive, this marketing program could totally give me an incentive to pick the better tag.

**Interviewer one** [00:50:10] Yeah, that makes sense. Well, thank you. It's been a pleasure.

**Interviewee two** [00:50:16] Yeah, I appreciate it. It's been an interesting to get me to think about something totally different.

**Interviewer one** [00:50:21] It's been good. And I imagine, you know, just thinking about you I imagine is kind of hard to get hit with all these big nuanced questions that are really important. But to really get the perfect answer, you would almost have to sit down for two days and think about it.

**Interviewee two** [00:50:40] Yeah. But I appreciate you looking into it. I think, interviewer two, this is going to be a great, interesting, very interesting thesis to get put together and see where that comes, because they know that diversity of the cattle ranchers in that program is just crazy. And so it'll be very interesting to see who you're able to talk to. And you know what their experience in it is. I I'm not saying we do everything right. We definitely don't. I'm not trying to be anything like that. But I've been talking traceability and, you know, marketing programs, trying to market my cattle better for a very long time. So this is easy things for me to get wrapped up about.

**Interviewer one** [00:51:24] Well, that's good to know. I'm just doing the first couple. Then interviewer two is gonna take over. So it will be interesting to see what. Yeah. Well, you know, whenever you have a group of cattle producers, you've always got. They're never the same. Exactly. That's it. Okay. Last thing, if you. Well, actually, you're. You have your address at your Web site, right? Is that where you'd like me to go?

#### Interview of Interviewee Three

**Interviewer one** [00:00:02] Interviewer one.

**Interviewee three** [00:00:05] Yes, this is interviewee three returning your call.

**Interviewer one** [00:00:07] Yes, interviewee three. How's it going?

**Interviewee three** [00:00:10] Good got the bull back where he belongs.

**Interviewer one** [00:00:21] Well good. OK so, again, thanks for being willing to talk with us. This is again, I'm a professor here in ag econ, and I've got interviewer two here too. He's a grad student doing his master's thesis on this in our department. And these interviews have been taken, what, 20, 30 minutes mostly, or what interviewer two.

**Interviewer two** [00:00:44] A little bit longer some were 30 minutes. The longest one was about 45 minutes.

**Interviewer one** [00:00:47] OK, gotcha. And you know what we're doing we're studying traceability. And, you know, like his e-mail said, what we're trying to do is to get an idea of what kind of traceability system would be seen favorably by cow-calf producers like you. And and so we're going to we're going to pose a number of questions to you, and they're all going to be open ended. And, you know, you can answer them in your own words how however you like, but because this is and also at the end, we'll get your address and we'll send, you know your time is valuable. And we know you like money, so we'll send you one hundred dollars in cash in appreciation for chatting with us. So since this whole thing's about traceability, we want to just kind of upfront describe what we mean about traceability and what traceability is going to mean for interviewer two's thesis. So, when we mean traceability, you know, we're talking about a system we're talking about a voluntary system to begin with. You know, not one not one mandated by law or anything. And and, you know, the point is to be able to trace that, you know, be able to take food and trace where it came from, you know. But a realistic system you know, we're not saying that a traceability system can take an any hamburger patty and figure out all the cows that went into it. We're just meaning you can get some information from, say, a batch of ground beef and and figure out where it came from. And to be able to give consumers and other people information about the beef. And and of course, we're interested in interviewing people like you who were involved in the Noble Research Institute project because ya'll participated in a traceability system. And again, we're looking at voluntary systems and we're also looking at a system like the one you participated in, where part of the purpose is is not just traceability, but to share information like information's pass down the supply chain. To meat packers and retailers about how the animals was raised and information is passed up supply chain back to you about things like carcass quality and other systems. And the final thing we want to say about what we mean by traceability because we don't want it to be confused with some market power issues. This is a system it could operate through open markets, vertical integration, or something in between. So, it's not necessarily tied to a specific form of marketing your cattle. Does that kind of make sense?

**Interviewee three** [00:03:37] Yes.

**Interviewer one** [00:03:38] OK. Well, what I'm gonna do is we're gonna I'm gonna hand it over to interviewer two and he's gonna go through the questions.

**Interviewer two** [00:03:47] Okay, I'd like to say, first off, I'm not an expert on the beef industry, I'm I grew up on a row crop farm in Alabama, so I know a little bit more about row crops. So, I might ask some dumb questions so just hang with me. But the first few questions are about your experience and the Integrity Beef Sustainability Pilot project and what did you like about the pilot project compared to the way you normally market your cattle?

## Theme A Information Sharing

**Interviewee three** [00:04:13] Well it gave us information back to let us know if we were doing something right or wrong. You know, we've been selling I got back in the business here in 2000 probably twelve, eleven or twelve. And we've been selling the calves at OKC West and then we don't know how they did in the feed lot, how they did at packing, or anything. This gave a chance to find out ok how they did in the feedlot. How is their gains and death loss? And then on to the packers, they gave a chance at how they did on the rail. To me, that was very good to find out that I felt that I turned out a good product. And I found out I really was.

**Interviewer two** [00:05:23] Well, that's good to hear. What information was most useful to you that you found out?

**Interviewee three** [00:05:30] Well, I think I only had one death loss in the feedlot. And so, the health of my cattle was good. Number one

**Interviewer two** [00:05:44] So that's good

**Interviewee three** [00:05:46] Yeah. And number two, I actually, on the rail I think, thinking off the top of my head here, but I think I had one heifer grade yield, all the others were choice. I think all the steers were choice. I may be off on that a few but not drastically. And but I mean, now I know that the bulls I'm using, the cows I'm using are producing a quality product. So, I'm doing something right that's what I'm saying.

**Interviewer two** [00:06:28] Yeah.

**Interviewee three** [00:06:29] Or at least I think I'm.

**Interviewer two** [00:06:30] Yeah, that's that's always good to find out and confirm. What did you not like about the pilot project, if anything, compared to the way you normally market your cattle?

**Interviewee three** [00:06:43] Really, I don't have any negatives to it. I really don't. I still sold mine at OKC West. I did not sell off the farm with that. I still sold at OKC West. I think the price was reasonable that I got there. And so, I don't really have a lot of negative if any.

**Interviewer two** [00:07:11] That that's that's awesome to hear. Did you notice any changes since you participated? You said you sold to the same feedlot. Did you notice any tangible benefits coming back to you from selling it to the same feedlot just by participating in the project?

**Interviewee three** [00:07:28] Well tangible benefits like I didn't get any extra money or anything, but I received information back and to me, that's always good.

**Interviewer two** [00:07:40] OK. OK. And how did you feel about sharing information about your operation and your cattle with others in the pilot program?

**Interviewee three** [00:07:48] Oh, that's how you learn. Find out somebody else is doing something better than you, you know. Learning.

**Interviewer two** [00:08:03] Yeah, yeah, that makes sense, and then you've kind of maybe already you talked a little bit about the information that you found useful. What information passed up the supply chain did you not find useful?



**Interviewee three** [00:08:23] There's maybe a little bit some details or whatever I'm trying to think, you know some of them I may not use as much, but you can learn a little bit information from everything. You know, the cost per animal. You know how many times they were vaccinated and stuff. All that information is good to you to let you know how they were doing. And how they did later after you left, after they left your place.

**Interviewer two** [00:08:59] I I I agree all all information is useful because it can always help you to learn and grow. And what steps were taken to make you feel comfortable sharing information about your operation?

Theme C Cow-Calf Producers Willingness to Share Information

**Interviewee three** [00:09:15] I'm comfortable with anybody coming out here and looking over my operation. In fact, last fall we had a pasturer on my place. I planted native grass in 14 and 2017 and 2018. And then also had some native grass that mature in their lifetime. So, everybody see how it came out, pros and cons, and so on. So, I'm willing to share any knowledge I have with anybody to improve the cattle industry or anything.

**Interviewer two** [00:10:07] That's good to hear. And if a pilot project was made permanent over, let's say, the next five to 10 years, would you continue to participate in it?

Theme E Will Cow-Calf Producers Continue to Participate in the Integrity Beef Sustainability Pilot Project?

**Interviewee three** [00:10:17] Definitely.

**Interviewer two** [00:10:19] That's good to hear. What why would you continue to participate in it?

**Interviewee three** [00:10:26] I think there's something to be learned every year. I I said it really didn't cost anything extra. And I got the information back that I didn't have before. I'd be a fool not to.

**Interviewer two** [00:10:45] Yeah always. What aspects of the pilot program, if any, would you recommend changing?

Theme B Issues with the Information

**Interviewee three** [00:10:56] The one thing I might do is we've put the EIDs in usually when we vaccinated them and second vaccination at weaning. And I'd probably true traceability I think needs to be when the calf hits the ground. I tag them on the ground and I think we might as well put the EID tags in at that point in time. So that's about the only complaint that I'd have.

**Interviewer two** [00:11:32] Do you believe the cattle industry would begin adapting traceable beef supply chains on a large scale?

**Interviewee three** [00:11:42] Do I think they will?

**Interviewer two** [00:11:43] Yes.

Theme G Are Cow-Calf Producers Open to a Large-Scale Traceability Program? and Theme N Managing Food Disease Outbreaks

**Interviewee three** [00:11:48] Not for a long time. There are too many people against that and their approach is, well am I gonna be paid for it. I've been in several meetings and stuff to where but why should I do it if I'm not going to be paid for it. But my approach is traceability lets you know, especially the sustainability study, but if something happens down the road, they can come back to you. If we would have a major outbreak of some disease in the cattle like this pandemic, you can go back to the source a hell of a lot faster if they are traceable. The same way everybody, well not everybody, but there's a big push for MCOOL. I'm not an MCOOL proponent. To me, you've got to have traceability before you can have MCOOL. I've seen in a feedlot Mexican calves and looking at them you can't sit there and say those came from Mexico.

**Interviewer two** [00:13:14] Makes sense. Do you think a traceability system is necessary to manage food disease outbreaks, like you mentioned?

Theme N Managing Food Disease Outbreaks

**Interviewee three** [00:13:24] I think it is. I think down the road there will be something happen. And like that BSE it screwed our industry up for several years. We could have come back and said that was restricted to this one county, one farm, whatever early on, it would have saved a lot of problems.

**Interviewer two** [00:13:56] Yeah, because then you can trace it back to exactly that one or two farms to where it came from. So that makes sense. Well, going back to what you said earlier, how do you do you think there's a way that the beef industry can convince more producers to participate or a way that they can get paid for participating in a traceability system?

Theme G Are Cow-Calf Producers Open to a Large-Scale Traceability Program?

**Interviewee three** [00:14:21] Laughs. You're going to need to have a new generation of ranchers I think is the only way. A lot of old who are all just stuck in their ways and don't want to change. If you can show the benefit some will gradually change. There got some benefit either cost to them you know where they get paid for it, they get information back. To me it was very worthwhile getting the information back and how they did in the feedlots and on the rail. And if people can see that more, I think that might convince them. I've sat there and listened to Dr. Peel tell 50 people at a meeting and getting at thirty-five forty people arguing against it and I'm sitting there shaking my head.

**Interviewer two** [00:15:33] That makes sense. Now, I want you to think about a hypothetical large-scale traceability beef supply chain. And we can imagine a successful voluntary program that cattle producers like yourself would like. And we can also imagine a voluntary traceability program that cow calf producers do not like. I know you maybe kind of answered this and some of this is maybe a little repetitive, but if you can think of anything else, that would be great. What if what if the beef industry did adopt a traceable supply chain on a large scale what would it look like if it was viewed favorably by cow calf producers?

**Interviewee three** [00:16:10] Probably I lost part of that what would it do to be favorable to cow-calf producers.

**Interviewer two** [00:16:17] Yes sir. What if the beef industry adopted a traceable supply chain on a large scale and it was viewed favorably by cow-calf producers what would it look like?

Theme K Attributes of an Effective Large-Scale Traceability Program

**Interviewee three** [00:16:31] Well, I think you have a store to get the EID. You have a tax building. The ones are expensive to read the EID surprised that the ones have got to become cheaper. Also, you got to have the capability to where you go out into the pasture and read from a little bit of a distance. The information you don't have to have the animal in a shoot. In fact, I think eventually there's going to be people with drones checking their cattle and you could have the capability to read different animals from a drone. Those are all things but the expense is the biggest thing that's got to be brought under control.

**Interviewer two** [00:17:38] How do you go about bringing that expense under control?

**Interviewee three** [00:17:43] Well with time all these electronics and stuff tend to get a little cheaper. However, some of these large companies tend to inflate their prices when they know they can get paid for it. I think apple phones is a good example. 700 dollars for a phone and it doesn't cost them anywhere near that. You know, well was it back in 70, but I believe 73 72-time frame I paid 75 bucks for a four function calculator. Because I was a squatter scheduler and an Air Force squadron tallying up all the numbers and stuff. I needed something to help me and a four function calculator was 75 bucks. Now you get them free at a lot of places or at most a couple of bucks. That's what has to happen. The price has got to come down. That's the biggest thing.

**Interviewer two** [00:19:24] That makes a lot of sense. If the beef industry adopted a traceable supply chain on a large scale that was viewed unfavorably by a cow-calf producer what would it look like?

Theme I Cow-Calf Producers Concerns about a Traceability Program

**Interviewee three** [00:19:37] Unfavorable? Expensive.

**Interviewer two** [00:19:39] Expensive. Yeah, I figured you would say that.

**Interviewee three** [00:19:43] Yeah, I would love to have a wand at my place but I haven't still yet and broke down a wand because I think they are changing. I think there's a lot of changes in the traceability between a VHF or UHF transmitter and so on a reader. And just because and I don't know what the final deal is going to be. I wish all the companies worked together to come up with a one solution and each kinda has their own brand and sell it. But I mean, the basic functions are all the same. Will it happen? Hell no. But it should.

**Interviewer two** [00:20:39] Do you think that regulations as a way to get one standard or is that even a possibility to do that? How do you think there would be a way to get a one standard transmitter?

Theme X Finding a Standard Ear Tag and Theme Y Importance of Compromising

**Interviewee three** [00:20:55] Well if NCBA and R-calf came up with something together and working for a one goal and the U.S. Cattlemen's Association. Everybody worked together and these organizations on this instead of battling each other. Will it happen? Probably not. But and then if they could get together and then they could come up with kind of a solution and go to the manufacturers and say, hey, you come up with a standard like this and we'll follow along. You work together, not at odds. People don't know how to compromise anymore.

**Interviewer two** [00:21:49] Yeah, I can I can totally see that. They want their way and only their way. So now I'm going to ask you some more specific questions about traceability beef traceable

beef supply chain. What information about you and your operation do you feel comfortable sharing with others like packers, feedlots in a beef traceability system?

#### Theme C Cow-Calf Producers Willingness to Share Information

**Interviewee three** [00:22:16] I would share where my cattle are what breed the bulls I use, what their EPDs are. I don't have DNA on all of my animals. I think I got them on a few of my heifers, my fine bred heifer. I would share that. As long as it's a two-way street, I don't have a lot of problems with sharing. If they don't take it down the wrong path, then use it to their advantage over me. Or they said well we're not going to pay as you much because you do not have DNA. That would be the only thing against it.

**Interviewer two** [00:23:15] That makes sense. You said it's gotta be a two-way street. What information to you would you want to see from packers and feedlots that would make sure there not trying to just solely just for their advantage?

**Interviewee three** [00:23:30] Well, I I'm comfortable with kinda what they said back to us on the last one. How many times the calves were doctored? I'd like to know what their treatment plans are when they first get them. Then how many times they had to treat them for a disease or anything. How many second times vacs were for the feedlots? What weights they left the feedlots going to the packer? Average daily gain, conversion factors. And then from the packers I would like to know how they performed on the rail. What percentage they dressed out at? You know how they're selling and stuff, you know, what are they getting out of it? Don't get me wrong right now, I know the packers are making a lot of money, but in 2014 cattle producers made a hell of a lot of money. I looked up the other day, we sold some 690-pound calves for 240 a pound. We did not share that with the packers. The packers should not have to share there I look at it as kind of a bonus right now. And so that's just economics, supply and demand, you know.

**Interviewer two** [00:25:26] Absolutely

**Interviewee three** [00:25:35] That's all go ahead.

**Interviewer two** [00:25:38] Well, if the beef industry did adopt a large-scale traceability system, do you think it should involve the USDA? And if so, how?

#### Theme M Role of the USDA

**Interviewee three** [00:25:47] No I don't. We got too many government regulations as it is, just plain and simple.

**Interviewer two** [00:25:53] I totally understand that free market system. So, who do you think should be in charge of it? If the government shouldn't be.

**Interviewee three** [00:26:10] Like I said, I think it's a NCBA, cattleman's, R-calf. They should come together have kind of a task force that works together.

**Interviewer two** [00:26:21] That makes sense. Do you think it should involve organizations like Noble?

#### Theme K Attributes of an Effective Large-Scale Traceability Program

**Interviewee three** [00:26:31] I think you could have places like that as maybe as third-party verifiers, and that gets around like the MCOOL. They push it, but until you get traceability, you can't have it. And if third party verifiers that come in just to spot check every so often and verify

that somebody was not bringing in Mexican cattle and putting an EID that said there were U.S. product. That's how I see Noble.

**Interviewer two** [00:27:07] So it's always good to have somebody watching and making sure people follow and following the rules and such. So now the beef industry did adopt a traceability system such that cattle producers felt compelled compelled to participate in order to find buyers. Do you think that might alter the market power of cattle producers as compared to the buyers of live cattle?

**Interviewee three** [00:27:37] I don't know. Hopefully it wouldn't, but I bet it would.

**Interviewer two** [00:27:45] How would you say it would?

Theme P Traceability Altering Market Power

**Interviewee three** [00:27:54] What was its last fall I visited a feedlot up in the Panhandle. They had some Brahmers up there and had the manager there say that his pack of plants had the last load of Brahmers that he shouldn't be able to take to his packing plant they thought it was too much trouble to cut out the hump. So there the packing plant is driving what type of cattle they're getting rather than and that that may be an I don't know. But they're forcing that feedlot to not buy a brand of cattle. Brahmer cattle are around. They're gonna be around maybe not in that part of the country. They're going to have to ship the Brahmers probably somewhere down to Texas, Louisiana, or whatever for packing plants down there.

**Interviewer two** [00:28:58] That makes sense. Are you concerned at all that large-scale traceability system might make the beef industry more like the swine industry or the broiler industry where it's almost like contract farming?

Theme Q Risk of the Cattle Industry Turning into the Swine and Broiler Industry

**Interviewee three** [00:29:19] I hope we will never go that way in the cattle industry. I know there's some large-scale ranchers and stuff, but I think it's just gonna take away and that I don't think we will ever see that in the cattle industry. I don't think you could have oh like farrowing houses for pigs. I don't think you can ever have anything like that for cattle. I may be wrong, and I hope I'm not. But that's what I think

**Interviewer two** [00:30:03] Do you think consumers care if the beef industry adopts a traceability system?

Theme O Do Consumers Care About Traceability?

**Interviewee three** [00:30:15] I don't think the consumer cares. Just like I don't think they care really about MCOOL. But I think if we could show them that if there is a disease or something that comes up, we have the capability to go back and I think that goes along with the BQA that it is best practices that we're using. But we're doing our best if we do a traceability is the way I look at and that consumers like to hear that.

**Interviewer two** [00:31:03] Yes. You were more thinking consumers care more about like just results and its healthy cattle and they can the beef industry can respond to a disease outbreak quickly and effectively, more so than they care about like labels and such.

**Interviewee three** [00:31:20] Yes.

**Interviewer two** [00:31:21] OK. Well, that completes all the questions we have. Do you have any comments you like to add or to suggest any more questions we didn't ask that you think we should have?

**Interviewee three** [00:31:32] I think you've covered most of them pretty well. I think this is something that needs to be out there and discussed and studied. I know they're doing up in Kansas on the traceability and voluntary. But I mean there's a lot to be garnered from all the information. It's going to be a long road to get everybody to use traceability, but I think it would be beneficial in the long run. I will say that.

**Interviewer two** [00:32:08] Anything worthwhile is going to be hard work and take a lot of effort and time.

**Interviewee three** [00:32:19] Is there any way to get a copy of what you get it all finalized and what your inputs were and a way to get that out to people that participated through Noble or whatever?

**Interviewer two** [00:32:36] Yes sir. We probably should've said this at the beginning. We are recording this e-mail and we're gonna give you a typed transcript that will be prepared from the audio file. We're going to give you a chance to look at it so it won't contain any personal information and your permission and stuff. And then also I'm writing this for my master's thesis so we'll go into publish it and of course, you can look at that.

**Interviewee three** [00:33:13] Once you publish your thesis, how will we know that and how can we get a hold of it?

**Interviewer two** [00:33:18] We will e-mail everybody when that is done.

**Interviewee three** [00:33:22] Outstanding. Outstanding. I would appreciate that. I'm pleased to see somebody is looking into this. I really am.

**Interviewer two** [00:33:37] Well, that's good. I thank you again for participating in this interview. And I know your feedback will help me a lot as I write my thesis. And I do think it's an interesting topic. One last thing before I let you go. We do want to get your mailing address so we can send you a hundred dollars in cash so you don't even have to write it on your taxes or anything like that.

#### **Interview of Interviewee Four**

**Interviewer two** [00:01:20] Hey, interviewee four, this is interviewer two I'm a grad student at OSU studying ag econ, and I'm writing my master's thesis on beef traceability. Is it still a good time to interview you?

**Interviewee four** [00:01:35] Sure is. If I can help, I'll be glad to try. I'm not sure if I'll be able to but I'll give it my best.

**Interviewer two** [00:01:39] That's all I can ask for. And I'm sure sure you will. Like I said, I'm writing my thesis on beef traceability, and I'm interested in just learning about your experience in the Integrity Beef Pilot Project and the traceability in general. And just thank you for allowing us to grant this interview and we are recording this interview. And then we're going to send you a typed transcript of what's prepared from the audio file.

**Interviewee four** [00:02:05] Now when you when you say, I have been a member or my ranch has been a member of Integrity Beef program for a while and I'm a big supporter of it. However, when you were talking about a pilot project, you're talking about something different than just the Integrity Beef Project.

**Interviewer two** [00:02:05] We're talking about, I believe, it was called the Integrity Beef Pilot Sustainability Project where you put your cattle into the project that was coordinated through Noble.

**Interviewee four** [00:03:08] I'm going to push you a little bit because I'm trying to make sure we're talking about the same thing.

**Interviewer one** [00:03:11] Hello interviewee four. This is interviewer one I'm a professor here in ag econ. And while he's doing the interviews, I'm kinda listening in to see if I need to come in at any time. So maybe this is a good time for you and I to figure out whether you are part of this thing or not.

**Interviewee four** [00:03:29] Sure let's talk about it. What I was trying to get him to find for me and remind me is that I have been in the Noble Program or Integrity Beef Program for a long time, and then there was a sub group of Integrity Beef members that started to get into a sustainability project or something within the Integrity Beef members.

**Interviewer one** [00:04:11] Yes sir. I believe so. They often refer to it as traceable sustainability pilot.

**Interviewee four** [00:04:15] Well wait a minute. So yes, I was in that project and I'm not sure I understood very well what the difference was in treatments. Because the Integrity Beef program has been a cut out kinda group of ranchers who that adhere to this strict program that Noble subscribes to us.

**Interviewer one** [00:04:29] Yes.

**Interviewee four** [00:05:08] I think they asked if we wanted to be part of a pilot program while we were clearly members of Integrity Beef anyway, so a program within Integrity Beef. That's what I was trying to clarify with your student. The answer is yes, we were a member of both them. What I'm also trying to say is that in the pilot program, I know differences were very difficult to discern. I mean in the pilot program we were able to sell in the field when our calves were being sold instead of going to market and being batched in a specific Integrity Beef group at OKC west in El Reno. But other than that, I can't remember there was anything specific that was different from the general Integrity Beef project. Now my assistant I think arranged with your student a separate interview as well with the guy that actually implemented the program at the ranch. He is kind of a foreman and I'm in Oklahoma City and that's in southeastern Oklahoma. We thought that might give two different kinds of experiences and aspects about the program. I'll stop talking but I wanted to be sure you knew where I was coming from and the program that I was in. I was in every program that I think Noble has. I guess we're one of the larger producers in it or so they tell me. I'll pause and let you ask away if there's anything that I can answer.

**Interviewer one** [00:07:22] Sure. Well, it might be it might be that the manager has more specific information because this was a program where they were cow-calf producers were sharing information about how they were raising the cattle, things like that. And then carcass information was being sent back to them from the meat packers and the retailers and such. So, it was all a traceability thing. You know, I'm guessing if you're it sounds like you're not really familiar with it that much. Maybe your farm manager is.

## Theme A Information Sharing

**Interviewee four** [00:07:58] Let me talk for just a minute and I'll explain it. First of all, you're right our ranch manager was dealing with it every day. I clearly was and you're right for reminding me now I see what the traceability is. That was extremely helpful and I was aware that we were getting information back and they would trace it all the way through the program and through the feedlots and wherever the calves were going. I was very familiar with the concept. But I didn't see the numbers. And I'll explain why the numbers that the specifics on the results of the traceability was it was kinda coordinated and orchestrated by Noble experts, the Ph.Ds. at Noble. And what they would do is they would they would explain to us and we did the kind of data they needed for this pilot program. And then they would trace our results of the sales as far as what we were getting versus the market and so forth. And then they would also give us carcass information back. But this was all orchestrated by Noble and the information and data that we would get back, would be ???presentable??? and it would also be interpreted by Noble and that was key. Because I'm a lawyer and so I don't have that deep of a background. I have been in ag all my life but certainly not to that extent. And so, they would say these carcass numbers are consistent with such such over the group. And as opposed to other Integrity Beef producers, they're better, or they're about the same, or we got premiums on this because and they would interpret it for us. And they also would actually work with us when we were selling in the field and indicate what premiums we could expect to get and helped us with the negotiation, actually with the with the feedlot operators that were negotiating at the ranch. So, they spoon-fed us through the program and didn't make the program any less impactful, in my humble opinion. But it was we were definitely or I was relying on them to interpret what the data meant. Now my manager was following the data, collecting the data would respond to whatever Noble said about what this means and interpret it for him and for us and he just you know implemented the program for us. Now, I think that that might be an interesting point of view, but I'm telling you what they did for us and the traceability aspects is very interesting. And after one year, they stopped the pilot program, as far as I know. Is that accurate or do you know?

**Interviewer one** [00:12:18] I'm not sure, you know, the pilot program I'm referring to I didn't think that people marketed each I didn't think each cattle producer marketed their cattle differently. I thought they all went through the same system.

**Interviewee four** [00:12:35] Now, wait a minute. That's what we did as Integrity Beef members and that's different than the pilot program. Pilot Program we yeah, the pilot program we actually had bidders in the field at the ranch. And they they I was trying to remember which year but the year before last they did that in the pilot program. But this last year they moved up the sale date and the pilot program wasn't part of the drill. It was all Integrity Beef producers and yes, we all we all filed in a group of the alleged premiums of Integrity Beef producers. So, I know that the way it's handled at Noble of course they publicize and work hard with feedlot operators, certain feedlot operators, to let them know what kind of program Integrity Beef is if they aren't familiar with it and remind them of the requirements and so forth. And then actually go and inspect the day before the sale. And with the feedlot operators and also so they're kind of publicists for the sales and to establish the quality in the minds of the feedlot operators if they are not familiar with it and then they become familiar with it. And then they bid and in the sales like in Oklahoma City West nobody else is selling except for Integrity Beef groups. And then they go into the regular sale. Does any of that make any sense to you?

**Interviewer one** [00:15:00] Yes. I mean, I do know it was almost exclusively Integrity Beef that was in the pilot.

**Interviewee four** [00:15:08] Yeah.



**Interviewer one** [00:15:08] Yes.

**Interviewee four** [00:15:07] Yeah in the pilot program nobody but Integrity Beef was in there. Yeah, you're right and I don't think everybody that was in Integrity Beef was in the Pilot Program. Yeah that's my understanding too. And I don't know how we were selected. I know that we have been in the Integrity Beef program for a number of years and as I said according to them, we're one of the larger producers. So I don't know if that anything to do with being chosen for the pilot program but so and I guess and you can help me with this the difference in mind I guess is the pilot program had this dimension of traceability and it was a lot more ???selective??? than even the Integrity Beef program, which is pretty selective in its own way. But this traceability thing is the element that existed in the pilot program to the extent that pushed that concept was the difference between the regular Integrity Beef program and the pilot program.

**Interviewer one** [00:16:32] Yes that does sound right. It was pretty intense. So, each operation shared information. How cattle were raised even things like range management plans, grassland management, vaccinations of cattle all that stuff. So, there's a database somewhere about all the cattle that were in the traceability program when they got vaccinations, carcass quality at the end, that kind and that's what that's the program that Robert wanting to interview you about.

Theme A Information Sharing

**Interviewee four** [00:17:01] See that's interesting because now the pilot program is an extreme of everything you said, taken to the next chapter or so of each of those elements that you just ticked off. So, the pilot program is also very much like the Integrity Beef program and the traceability aspect at least in my layman's mind is the thing that made it different. I know I hope this is not talking out of scope but the Noble guys were phenomenal about holding our hand and consulting with us about what our data meant. As far as sharing with others in the pilot project information with other producers in the pilot project, we didn't do that individually, but I'd assume that Noble took that into some database like you say and share that with the producers and say here's how you stacked up against the other producers in the pilot program, here's how you stack up against regular Integrity Beef participants. They made it alive. They made it constructive. I think without that tutelage we would have learned a lot less.

**Interviewer one** [00:18:32] OK. Well, that's it if you don't if you don't know mind, what we're going to do is, um, I'm going to kinda take over the interview and handle it a little bit differently because you're already hitting a bunch of questions. That's very useful for us. Is that okay if I just ask you some more questions?

**Interviewee four** [00:18:56] It seems like that's probably the best use of our combined times and I'm trying to be helpful.

**Interviewer one** [00:18:56] Sure.

**Interviewee four** [00:19:08] It's a struggle though because remember I'm at 60,000 feet as an owner and I'm not on the ground.

**Interviewer one** [00:19:08] Right. Yeah, well, you can just tell us, like, what you know what you found useful. So first, let me ask like this so you you did a really good job of describing how Noble Research took the data and gave you feedback that was useful to you. Do you remember some specific items that you found were particularly useful?

Theme A Information Sharing

**Interviewee four** [00:21:43] You know every box that you checked a minute ago when you were describing the pilot program is what they did. They would say ok we need data for this and if it was different from the Integrity Beef program that would be helpful, they would tell us we want more of this instead of less, we want more of that instead of less. And then they would it took each of those areas that you went through a minute ago when describing the pilot program. Add it was animal focused but as you know Noble is extremely helpful when you're in the Integrity Beef program. They give advice on everything on the ranch including the soil, including the pasture, including grasses, including weeds, including everything having to indirectly do with impacting cattle production. So anyways they would take you know you mentioned vaccination for instance they would dictate actually to be sure we got the right kind of vaccines for whatever they wanted us to do. And that was all uniform I'm sure with participants with not only the Integrity Beef Program but with the pilot program. And they would tell us if they were having some problems with pink eye, we're having problems with black leg, and blah blah blah. And it would also depend on what part of their market we were in as you know Noble is in southern Oklahoma and North Texas and we're in southeastern Oklahoma, so what might have impacted us might have different for ranchers around Lawton, Altus, or Duncan. And so they were always describing how we stacked up and they would also would kinda give us those conclusions at the end especially after we were finished and we were selling is that you know your cattle your your steers were at this age were heavier than the others in the pilot program. It was whether you were 50 or 100 pounds heavier with the same period of time. They were always describing that ???piece with??? other. And again, I can't imagine how it could be as meaningful without their overview and other tutelage.

**Interviewer one** [00:22:36] No that's very helpful, absolutely that makes a lot of sense. And, you know, sometimes cattle producers are reticent to be involved in a program where they're sharing information about their own operation. So, what is it that made you feel comfortable participating in this and sharing your information with others?

#### Theme C Cow-Calf Producers Willingness to Share Information

**Interviewee four** [00:22:53] It's real easy Noble. I've had a lot of experience with Noble and have always been. I mean I grew up around cattle when I was a kid and small operations and so forth and our operations will partner. I've always had the mindset that, you know, if we could qualify for Noble help, it would be very very special. And it has turned out to be that way. Our experience has been extremely good with them. Sometimes some of their advice we feel like it's a little bit expensive and costly versus the economics of the reality. But they always have fertile ideas and are always trying to help improve production and profitability.

**Interviewer one** [00:23:45] You know, you're going to laugh at this. But I always thought, I didn't know Noble Research Institute charged for the services.

**Interviewee four** [00:23:53] They don't.

**Interviewer one** [00:23:53] Oh, OK. So, what were you saying was expensive then?

**Interviewee four** [00:23:58] I'm talking about they they would give us advice to do X, Y and Z.

**Interviewer one** [00:24:04] Oh, OK.

**Interviewee four** [00:24:05] And that advice was very costly. As it relates to production and the realities of the marketplace or the economics involved in selling in the market place. No no no Noble your right Noble doesn't charge anything.

**Interviewer one** [00:24:24] Gotcha. Gotcha.

Theme Z Convincing Workers to Implement Recommendations of Noble Research Institute and Theme C Cow-Calf Producers Willingness to Share Information

**Interviewee four** [00:24:27] Well, I'm always having struggles with some of my cowboys and foreman because they always are thinking that their ideas are so fancy sometimes. They always think their ideas are so costly. It's always been very helpful. Now, I've stuck with them because I like the concept and I'm not like some of those other people that you talk about are afraid to share information with others. I'm not afraid at all and because it's Noble I'm really not afraid. I've done a lot of work for Noble affiliates which is their oil and gas company. As a lawyer, you know I was very familiar with Noble and I've also been very impressed with what they done in the agricultural area as well as their research. They were the ones that provided the credibility for me. I had no hesitation what so ever. I was giving you a little color with regard to some of my on the ground guys. Who think that some of their advice is a little fancy and costly, and it really isn't. Well, sometimes it is. But I also had to establish in the eyes of the guys on the ground from the very beginning that while Noble guys are well, everyone we dealt with had Ph.Ds. in various parts of agriculture. Most of them and this is what my people had a hard time understanding, most of them had grown up on farms and ranches. And they did have an agricultural background. They thought they were all just pie in the sky guys, you know. They're academic it's fine what they teach or what they they would they put in books, but they don't really understand what the real world is like. I established with them that hey they sure as hell do. They all came from farms and ranchers. Oh no shit did they really.

**Interviewer one** [00:26:46] So do you do you think the beef industry as a whole is gonna start moving towards traceability on a large scale?

Theme W Cattle Industry not a Profitable Business

**Interviewee four** [00:26:54] I would think that it can do anything but, I think it's just very I think it's just an evolution of kind of primitive ways that, you know, were present for generations to today where it is much more like factory production. And you've got to have quality and you got to compete and you've got big, big purchasers like, you know, McDonald's and all the big big chains like that, Burger King. And they want quality and they want to be sure that's even though say you're a lot smaller you would like to be in a group that is thought of in that manner so that you can get a fair price for your product. It's so hard to make money in the area as you know. And it always has been. I think you have to be move those primitive methods of farming to much more sophisticated techniques like this traceability concept.

**Interviewer one** [00:28:11] Right. You're you're a very progressive cattle producer. You know, compared to the average.

**Interviewee four** [00:28:18] Yeah.

**Interviewer one** [00:28:18] To the average cattle producer. That's why you're an Integrity Beef and all that. Do you think that if we're gonna go if we are going to move towards traceability on a wide scale? Do you think it's because they're going to develop programs that other cow-calf producers are going to decide, yeah, I want in on this or do you think there's other cow-calf producers are going to be forced into traceability programs?

Theme L Large-Scale Traceability Might Force Some Cow-Calf Producers to Leave the Industry

**Interviewee four** [00:28:46] They're either going to be forced into it or they're going to go away. They're not be able to make it. I also think that there's a distinction to make that I find interesting is the urgency or lack of urgency that people who need to make a sole living in agriculture have versus people who are like me who have other sources of income. There's not quite the urgency for me but on the other hand I've you know profitable businesses and I've profitable businesses and I know the difference. And so, while I like the aesthetics and intangibles of dealing with the ranch, I would like it to be a business and a viable one. So I'm a person who doesn't have to make a living from the ranch but I want it to be a viable business, and in order to be one I think in this time I think it's almost a necessity that you have this traceability element floating to the top. And if you're so lucky to have the support of sophisticated people like Noble people.

**Interviewer one** [00:30:15] Hey, so do you think that we're gonna have to have a traceability system to manage disease outbreaks like foot and mouth?

Theme N Managing Food Disease Outbreaks, Theme G Are Cow-Calf Producers Open to a Large-Scale Traceability Program?, and Theme A Information Sharing

**Interviewee four** [00:30:48] Yeah yeah. I definitely do in fact I think that would be so helpful. You know in so many aspects of the business for me and of course that disease is a good example but I think there's so many aspects of the business that traceability, I mean you get a report card about how you're doing and others you get a report on how others are doing better. I just that's that's just so helpful if you just listen. I think it's interesting because a lot of guys who are on the ranch that work there are kinda like what you're talking about is kinda the old school well I've done this forever and I know how to do this and nobody is going to tell me about this. But they aren't as close to the finances as I'm and they don't they don't appreciate those aspects. So, I think you're forced to do it unless you have rocks in your pants. And I'll say again I think having someone like Noble is just such a special thing. There's nothing like them. I don't know of anything like Noble in other parts of the country even even the Cattle Producers Coalition. Do you?

**Interviewer one** [00:31:59] Not quite like that. No but I but I wouldn't know of them as well as you.

**Interviewee four** [00:32:03] Well I don't, you know, I don't think I don't know any places out west like Montana, Wyoming and I I have done a lot of work for oil companies up in that area and of course a lot of the people have ranching interests and I don't think I have ever seen anything like Noble that helped them at all. ???But??? a lot of them struggling kinda business, well I grew up around this and no one is going to tell me how to do it.

**Interviewer one** [00:32:44] You know, when people set up a nonprofit now, they rarely do it to help, you know, producers. It is just not a fashionable. So, do you think the USDA should have any role on traceability?

Theme M Role of the USDA

**Interviewee four** [00:33:07] Well I was in the government in Washington, I was involved in high levels of the federal government, and I'm not overly excited about bureaucracy. And its ability to actually to perform well. I don't know if the USDA is the right. It's interesting because that's a logical place for that but the bureaucracy scares me, as far as being able to actually pull it off.

**Interviewer one** [00:33:07] Yeah, I see what you mean.

**Interviewee four** [00:33:47] I know you probably have experience with bureaucracy. It's very difficult.

**Interviewer one** [00:33:47] Oh, yeah. Oh, yeah. Do you or do you think there if we do go towards more traceability and you know, so suppose like you said, cattle producers either get into the system and we can trace beef or they have to get out. Do you think there's gonna be some market power issues that go along with that?

**Interviewee four** [00:34:13] By market power do you mean that are negative?

**Interviewer one** [00:34:13] Negative or positive? Well yeah, it could be positive.

Theme P Traceability Altering Market Power

**Interviewee four** [00:34:19] I can't think of anything particularly negative. As long as it's available for everybody, I think this a microcosm of what we're talking about Noble markets Southern Oklahoma and North Texas. I think I don't know how people are chosen for pilot program or the Integrity Beef thing. And so, I think that people as long are willing to inherit programs and the direction that Noble has. I think that's open to anyone so that's where I'm going with that.

**Interviewer one** [00:35:15] Gotcha yeah.

**Interviewee four** [00:35:22] As exclusive as you know not available for everybody, I think there could be some questions.

**Interviewer one** [00:35:25] I guess the main the main question that was a you know, there there were some cattle producers who think anything other than just selling at the auction market is going to go against them.

Theme G Are Cow-Calf Producers Open to a Large-Scale Traceability Program?

**Interviewee four** [00:35:37] Oh, absolutely absolutely. They do and that are the types of people. The stereotype that I'm talking about when I say that you know those people who say I know how to do that, I have always done that, no one can tell me any different, and all the other stuff is just a bunch of gobbly gook. You know, because it's it's really not helpful. It's just bunch of academics strutting around and telling me how to do things, but I know better. That's the mentality is, you know, of all people, I'm sure you talk to a lot of people out there that are in the markets of producers that have that attitude, in fact many do. I'm befuddled by it. I think it's insane. You get somebody like, you really get somebody like Noble. I mean they're just amazing. I think if you make the most of their kind of help that's just amazing.

**Interviewer one** [00:36:59] Well, this is our final question for you. Do you think consumers care if the beef industry adopts traceability?

Theme O Do Consumers Care About Traceability?

**Interviewee four** [00:37:27] Well, I don't really know who consumers are. If you're talking about a retail consumer, they probably don't. I think that they should, but they don't because they don't think about it that deeply. The big producers, the big consumers like a McDonald's, Burger King, and like that, you better believe they do. They eat it up. And they're always looking for an edge on their competitors and their competition and one way to beat it is you know being able to offer our meat is superior and we can prove it and blah blah blah. Yeah, I think they care a lot.

**Interviewer one** [00:37:57] Yeah yeah. I think it was because McDonald's, I'm 99% sure, was one of the groups in this pilot traceability program.

**Interviewee four** [00:38:12] I think you're right. I definitely think you're right. Well I was going to say is any of that helpful?

**Interviewer one** [00:38:18] Oh it was very helpful, more more that more than you actually probably think. Are there kinds of things that we didn't anything that we didn't hit on about traceability or didn't ask about that you think is important that you'd want to bring up?

**Interviewee four** [00:39:23] No I don't think of anything right of. I think you have emphasized by this conversation to me, it's made me think more seriously about traceability as a serious and not just an exercise. I think you made me think about it in you know, a much more different, serious way. So, I can't think of anything extra that we haven't talked about. But I'm certainly I'm certainly thinking about traceability in a whole different way even though I was in the pilot program

**Interviewer one** [00:39:23] Well, the reason we're thinking about it so serious is because you were in the pilot program. So, you're really the one who started it. Like just the last thing, interviewer two is going to get your mailing address and we'll send you a hundred dollars in cash in appreciation for your time today. Well, we liked it. Just try to remember to sign the receipt and send it back.

#### **Interview of Interviewee Five**

**Interviewee five** [00:01:02] This is interviewee five.

**Interviewer two** [00:01:03] Hey, this is interviewer two, the graduate student at Oklahoma State, who's in ag econ and is doing his thesis on beef traceability. Is it still a good time to interview you?

**Interviewee five** [00:01:13] Yes.

**Interviewer two** [00:01:15] OK awesome. Well thank you so much for granting us the time to do this interview. And I'm like I said I'm writing my master's thesis on beef traceability. And we are mainly interested in learning about your experience in the Integrity Beef Pilot Project and traceability in general. And we will be recording this interview and we will send you a typed transcript, which will be prepared from the audio file. And the transcript will not contain any of your personal information. Is this OK? And do you understand that?

**Interviewee five** [00:01:49] Yes.

**Interviewer two** [00:01:50] OK awesome. Well, like I said, thank you thank you so much for granting us this interview. And before we start the interview, I just wanted to share with you our working definition of what we mean by traceable beef supply chain. Traceable beef supply chain is one where cattle and its beef can be traced from the farms on which the cattle are raised throughout the beef supply chain until the point of consumption, while a single hamburger patty cannot be traced to the individual cattle from which it's made. We think this is a little bit too unrealistic. It is possible to be traced to a collection of farms. We are concentrating on a voluntary system, not a mandatory traceability system, one where producers have the option and it's their choice whether they want to participate. And in this system, information is passed down the supply chain, from producers to meat packers to retailers and information like carcass qualities passed up the supply chain from meat packers and retailers back to cattle producers. Such a

traceable system might operate through open market, through vertical integration, or something in between. Does that make sense or do you have any questions about that?

**Interviewee five** [00:03:05] No I'm good.

**Interviewer two** [00:03:05] OK awesome. Well, let's get started with the interview then. The first few questions are about your experience in the Integrity Beef Sustainability Pilot project. So what did you like about the pilot project compared to the way you normally market your cattle?

Theme A Information Sharing

**Interviewee five** [00:03:24] I like the Integrity Beef Program in the sense that, you know, we're trying to use the top-quality bulls of each breed. And then as far as the traceability just getting some of the data back to us from the the packer or from the packinghouse was helpful.

**Interviewer two** [00:03:53] What what data did you look at particularly that was most helpful?

**Interviewee five** [00:03:59] You know, we looked at it on carcass quality and grade and just generally those if we felt like that we were above average in the industry, you know, as to comparing it with other cattle that were coming through the feedlot at about the same time. It also of course the quality grades on the packing end of it but then information from the feedlot is far as growth of the animals increase conversion at the feedlots.

**Interviewer two** [00:04:43] Okay, that makes sense. And I can see how that would be helpful. And what did you not like about the pilot project?

Theme B Issues with the Information

**Interviewee five** [00:04:52] It just took a little while to get all the data back. You know, other than that just, you know, it would have been nicer if the data would have been quicker coming back but other than that it was all good.

**Interviewer two** [00:05:10] Well, that's good to hear. Do you have any suggestions for how you think the data could be given back to you quicker?

**Interviewee five** [00:05:19] I don't. You know I the folks at Noble did a great job. You know, we had numerous producers in the cattle being fed in the pen and just getting data back I realize was a pretty monumental task in itself.

**Interviewer two** [00:05:43] Yeah. Anytime you have that much data being given back and share it can be a pretty huge task. And how did you feel about sharing information about your operation and cattle with others in the pilot program?

**Interviewee five** [00:06:00] It didn't bother us. Now we we're actually a college. And so it didn't it didn't bother us at all. We were glad to share the information.

**Interviewer two** [00:06:18] OK. And then you may have already answered this, but what information passed up the supply chain to you did you find useful?

Theme F Issues with the Integrity Beef Sustainability Pilot Project

**Interviewee five** [00:06:32] I'm not sure you know as far as you know, we gave them the information. All of our cattle pass that information up. And I don't know if the feedlot or the packinghouse felt like it was beneficial to them. The integrity program you know we're using the

top 20 percent of each bulls. We were hopeful that our cattle would grade yield and grow better than what the average run of the mill feeder cattle would have. And so, you know, we were hoping to drive more money from superior cattle.

**Interviewer two** [00:07:20] OK that that makes sense. And then what information did you not find useful?

**Interviewee five** [00:07:31] Oh, I don't know. Right off hand, I found it all interesting and useful all the information that we received. I didn't I didn't find any that you know I said was not useful.

**Interviewer two** [00:07:54] That that's that's good to hear. And it's always any information is always a good learning experience.

**Interviewee five** [00:08:01] Yeah.

**Interviewer two** [00:08:01] And you said you said you were comfortable sharing the information, but what steps were taken to make you feel comfortable sharing information about your operation or made you feel more comfortable sharing?

Theme C Cow-Calf Producers Willingness to Share Information

**Interviewee five** [00:08:13] I'm going to answer this as I'm an individual producer. It's myself but, you know, for the college, you know, for our college, you know, we're a public university or public public college. So, you know, we we want to as an individual myself, and as having cattle as long as it doesn't personally identify me, you know, by name or in or that manner. I'm comfortable with it. I I didn't find anything personally that I would have found a fault or issue with.

**Interviewer two** [00:08:49] Well that's good. You said you individually raise cattle as well and then you also are in charge of raising it for a university as well?

**Interviewee five** [00:08:58] That is correct.

**Interviewer two** [00:08:59] OK. I just I just wanted to clarify that to make make sure. And then if the pilot project was made permanent over the next five, 10 years, would you continue to participate in it?

Theme E Will Cow-Calf Producers Continue to Participate in the Integrity Beef Sustainability Pilot Project?

**Interviewee five** [00:09:11] Sure. Yeah.

**Interviewer two** [00:09:12] Any particular reasons why?

**Interviewee five** [00:09:17] Oh, you know, I mean, it paid a little extra money.

**Interviewer two** [00:09:20] Yeah, that's always nice.

**Interviewee five** [00:09:22] Yeah. That extra money was helpful. You know, if it didn't pay extra money, we would try to participate in it, at least on a more limited basis. You know, the information then we would receive out of just is carcass and growth and, you know, things like that. While that is beneficial to us. You know, we would for the extra work, we would love to have some monetary value associated with it.



**Interviewer two** [00:10:01] I can I completely understand that train of thought. And what aspects of the pilot program, if any, would you recommend changing? You already touched a little bit about the data coming back quicker. Do you have anything else to add to that?

**Interviewee five** [00:10:22] You know, I don't. Other than data back a little little more timely. That would be the only thing.

**Interviewer two** [00:10:32] Okay. Okay. And do you believe the cattle industry will begin adopting traceable beef supply chain on a large scale level?

Theme G Are Cow-Calf Producers Open to a Large-Scale Traceability Program?

**Interviewee five** [00:10:47] I don't know. We're still at a crossroads. It'll all depend on I know that I think most everybody, producers and consumers, would love to have traceability and the traceability that you talk about, you know, all the way down to basically the steak level. I don't know if people would pay a lot to that degree. I think they do want to be able to go back to an individual animal and you know, it's it all depends upon cost associated with it.

**Interviewer two** [00:11:34] So when you say we're at a crossroads, are you mainly referring to the cost of it?

Theme K Attributes of an Effective Large-Scale Traceability Program

**Interviewee five** [00:11:41] You know, the question of whether it becomes a mandate, you know, there is a cost, whether whether it's mandated or not mandated. And so, you know, the cost is the biggest factor and then whether it's mandated or not mandated is probably the two issues. You know, additional funding toward it would have to be widespread across an industry to get a great to get a great amount of people involved. I don't know if there's a funding or or if you know that the producer feels like that they're getting extra value on traceable animals.

**Interviewer two** [00:12:38] That make sense. And when you say funding, who do you think would fund that?

**Interviewee five** [00:12:43] I don't know. You know, it ultimately would have to you know that the consumer would ultimately have to do it if it's not mandated. You know, if it's mandated, you know, then you know, the government, you know, would do it. But I don't know that there's going to be. And I guess that's the biggest question is whether either one of those whether the consumer will pay more for traceable product or if the government will pay to have a trade.

**Interviewer two** [00:13:27] That that makes sense. And now we want to transition to suppose the beef industry does adopt does adopt a traceable beef supply chain on a large scale level. We can imagine a successful voluntary program that cow calf producers like yourself would find favorable. We can also imagine the successful program that cow calf producers or unsuccessful program that cow calf producers like yourself would not find favorable. So if the beef industry adopted a traceable supply chain on a large scale that was viewed favorably by the cattle industry what would it look like?

Theme K Attributes of an Effective Large-Scale Traceability Program

**Interviewee five** [00:14:10] Of course, you know it you know, I thought a lot about this. And, of course, it starts with, you know, at least right now the technology is some sort of EID tag and it's staying with the animal. The question becomes is I think there has to be a block chain established that, you know, multiple inputs without somebody having total control over that. And so the way

I understand how block chain works is that, you know, multiple people can input and but yet they don't have access to that database or, you know, or a complete access to databases. So, you know, who controls the database ultimately, who controls the database will be a big issue. And then how the cost, you know, relatively easy on the cost of the EID tag. But the initial cost of getting them into every animal and then, you know, putting it into every animal at birth or near birth or, you know, at that time. And who would fund that cost. I just if the government came up with ten dollars a head or something like that, I think it would go a long ways to traceability.

**Interviewer two** [00:16:03] That makes sense. And that's the beef industry adopting a traceable supply chain on a large scale that was not viewed favorably by the cattle industry what would it look like?

#### Theme R Traceability in Other Countries

**Interviewee five** [00:16:14] It should be it became what we got right now, which is kind of a cluster. You know, that while there's a lot of, you know, the rest of world or a big part of the rest of world has adopted traceability, the United States hasn't. And you know that that probably is an issue for our foreign sales. But what it looks right now unless, you know, we can get a plan in place that gets well established and well accepted is that we just kind of wallow along here the way we've been doing without much success in it.

**Interviewer two** [00:17:01] I've come across that the United States is a little bit far behind in terms of traceability to other countries as well when I was starting my research. Why do you think the United States is farther behind on traceability than other countries seem to be?

#### Theme G Are Cow-Calf Producers Open to a Large-Scale Traceability Program? and Theme R Traceability in Other Countries

**Interviewee five** [00:17:17] Well, it goes back to somewhat of a political debate. Cattle people tend to be very independent and the cattle industry is very lightly regulated by the government. And in so in that respect, the industry hasn't doesn't really have a strong voice that is representative or that a large part of the industry has agreed that they're there that they speak for the cattle industry. And I know the Cattlemen's Association those people kind of think they do. But, you know, there there isn't where we're not mandated by the government and we have light regulation and that traditionally, you know, there's no accounting at sale barns, you know, for sales of cattle and things like that. None of that information is reported to the government. And so it lends itself to not being highly traceable.

**Interviewer two** [00:18:37] That makes sense. And now we're going to transition to more specific questions about a traceable beef supply chain. What information about you and your operation do you feel comfortable sharing with others in a beef traceability system?

#### Theme C Cow-Calf Producers Willingness to Share Information

**Interviewee five** [00:18:59] Well if the traceability system was just a cow number, that the cow numbers, the EID numbers you know. They I think most everybody would. If they were mandated to put in the EIDs, they would be comfortable with the numbers. And then, you know, I know ultimately those have to trace back to farm I.D.s and anything like that. And I think most ranchers would be against the use of their names all that information, they would be opposed to that.

**Interviewer two** [00:19:51] That's that's that's understandable. Do you believe a traceability system is necessary to manage disease outbreaks like mad cow disease or foot and mouth disease?

Theme N Managing Food Disease Outbreaks

**Interviewee five** [00:20:03] It would be in foot and mouth. I don't think it's absolutely or at least the traceability system that we have in place has pretty well handled the mad cow. Foot and mouth is a well that's a whole different ballgame there.

**Interviewer two** [00:20:27] So what would highlight the difference between the two? How what highlights the major difference between the two and how?

**Interviewee five** [00:20:35] Well the foot and mouth is so highly contagious that that, you know, a a real real well thought out and a great individual ID down to the cow, the whole nine yards would be extremely helpful in a foot and mouth outbreak. But, you know, it isn't that important in mad cow because mad cow isn't it isn't a really highly, highly contagious, like a foot and mouth.

**Interviewer two** [00:21:16] That that makes sense. And if the beef industry adopted a traceability system do you think it should involve the USDA? And if so, how?

Theme M Role of the USDA and Theme H Voluntary or Mandatory Traceability Program

**Interviewee five** [00:21:40] I would expect so because ultimately to get the traceability system, I believe, is going to require a mandate from government. And so that means that the government will be paying part of the costs and so USDA would probably be the lead agency associated with it.

**Interviewer two** [00:22:08] OK, so you're thinking a mandatory system is more likely to cause a traceability system on a large scale than a voluntary system?

Theme H Voluntary or Mandatory Traceability Program

**Interviewee five** [00:22:20] I do.

**Interviewer two** [00:22:21] OK. And if the beef industry did adopt traceability system such that cattle producers felt compelled to participate in order to find buyers. Do you think that might alter the market power of cattle producers as compared to the buyers of live cattle?

**Interviewee five** [00:22:43] Hit me with that one again.

**Interviewer two** [00:22:44] Yeah. No, no problem. It's kind of a long question. If the beef industry adopted a traceability system such that cattle producers felt compelled to participate in order to find buyers. Do you think that might alter the market power of cattle producers as compared to the buyers of live cattle? We're mainly thinking about how the swine and broiler industries have gone, basically, for lack of a better word, contract farming. Do you see that happening to the cattle industry?

Theme P Traceability Altering Market Power

**Interviewee five** [00:23:14] It is it is happening. It's already happened at on the live cattle basis, you know, and I say fat cattle. You know you know that that contracting has is has already taken over the biggest part of that industry already, you know, as far as the feedlot cattle. There is already a lot of contracting happening in the stocker phase industry, you know, so those cattle

going into the feedlot, there's a lot of contracts taking place now. And, you know, I think it's that is kind of inevitable that that the traceability does lead to more contracting of cattle yeah.

**Interviewer two** [00:24:12] Okay. Do you think that's do you think that's a bad thing or a good thing for cow-calf producers?

**Interviewee five** [00:24:23] Well, for large producers, it is probably a good thing. Smaller producers, it's probably not so good. And but though I think it's going to happen either way, you know, whether there's traceability or not that that consolidation into larger and larger producers is pretty well inevitable.

**Interviewer two** [00:24:49] OK, that's that's understandable. And this is the last question. Do you think consumers care if the beef industry adopts a traceability system?

Theme O Do Consumers Care About Traceability?

**Interviewee five** [00:25:03] If you ask him, do they care? Their answer would be yes. But the question I think is will they pay more for a traceability system? Will they be willing to pay more? And my perception is not to a great degree. Now, in what I mean by that, there will be a segment of the industry that, you know, on a high end a whole food type deal that I think that, you know, people would like to know that it would pay some more for that. But I don't think it's a significant part of the consumer.

**Interviewer two** [00:25:53] Okay, that makes sense. Well that completes the questions we had prepared. Thank you again for participating. Do you have any comments you would like to add or suggest any questions we didn't ask that you think we should have?

**Interviewee five** [00:26:07] No, it's it's interesting and I hope it's a well, you will it will be a if you can if you can crack it and make traceability work. I'm all about it.

**Interviewer two** [00:26:21] Well, I can't promise you that. But I will try to get the research as best we can. Well, just one last thing before we let you go. We do need to get your mailing address so we can send you a hundred dollars in cash and you don't even have to write it on your taxes or anything.

### **Interview of Interviewee Six**

**Interviewee six** [00:01:09] Interviewee six.

**Interviewer two** [00:01:12] Yes, this is interviewer two the masters student studying ag econ at OSU. Is this still a good time to interview you?

**Interviewee six** [00:01:20] Oh you bet it sure is.

**Interviewer two** [00:01:21] OK awesome. Well, thank you for granting us this interview. And I just want to say I'm writing my thesis on beef traceability, and I'm interested in learning about your experience in the Integrity Beef Sustainability Pilot Project and about about traceability in general. And like they like the email said, we are recording this interview and we will prepare a typed transcript from the audio files so all your information will remain confidential and your personal information will not be will not be used. Does that sound ok?

**Interviewee six** [00:01:54] Oh, that's acceptable.

**Interviewer two** [00:01:55] OK. Yes. Yes, yes, sir. And before I start getting with the interview, I just want to share with you our working definition of a what we mean by a traceable beef supply chain. Traceable beef supply chain is one will cattle and its beef can be traced from the farms on which the cattle are raised throughout the beef supply chain to the point of consumption. While a single hamburger patty cannot be traced to the individual cattle from which it is made can be traced to a collection of farms. We think tracing to a single hamburger patty might be a little bit too unrealistic. We are concentrating on a voluntary, not a mandatory traceability so it is the producer's choice whether they want to participate or not. This system information such as farm production practices, is passed down the supply chain from producers to meat packers to retailers and information such as carcass quality is passed up the supply chain from meat packers and retailers back to cattle producers. Such a traceable system might operate through open markets, through vertical integration, or something in between. Does that make sense or do you have any questions about that?

**Interviewee six** [00:03:03] No my only question is, what is your name again now?

**Interviewer two** [00:03:05] It's an interviewer two.

**Interviewee six** [00:03:08] Hey interviewer two. Ok interviewer two ok now you and I the only ones on the phone call?

**Interviewer two** [00:03:11] My advisor, my master's advisor, interviewer one, is listening in on the phone call and he will.

**Interviewer one** [00:03:19] Hi. Thanks for the interview. I'm just here in case you have some questions that interviewer two has trouble answering or something.

**Interviewee six** [00:03:27] Ok fair enough.

**Interviewer two** [00:03:31] OK. So, let's get started with the interview. The first couple questions are about your experience in the Integrity Beef Sustainability Pilot project, which was coordinated by the Noble Research Institute. What did you like about the pilot project compared to the way you normally market your cattle?

**Interviewee six** [00:03:52] There was an additional venue in which to sell the animals i.e. a private treaty sale, that would typically not be available.

**Interviewer two** [00:04:06] How how did that benefit you?

**Interviewee six** [00:04:09] It did not.

**Interviewer two** [00:04:10] It did not.

**Interviewee six** [00:04:11] But you asked me and I have to apologize, interviewer two. When I'm asked questions, I probably I am trained by my background to listen to the question real close. And you may get unusual responses from me because I'm answering the question and not maybe what you think you're asking. If that's if you understand.

**Interviewer two** [00:04:37] Yes. Yes, sir. So that so getting back to that, what what made you like that additional venue?

**Interviewee six** [00:04:44] Well, I liked it that there was a possibility of getting a better price. What I did not like was that it did not work out as planned. I liked it when I was first advised of the program. Everybody thought that we would have an additional venue in which to sell animals,

i.e. have a treaty that's, you know, or we can go ahead and go to the sale here in Oklahoma City West. OK, everybody would be agreeable to that. Now, the next question you asked me was more a past tense, you know, after the process was over with, what did I like? I didn't I did not like in retrospect, what they did, does that make sense?

**Interviewer two** [00:05:38] Yes, that makes sense. I'm I'm understanding now. And then how did you feel about sharing information about your operation and cattle with others in the pilot program?

Theme C Cow-Calf Producers Willingness to Share Information

**Interviewee six** [00:05:50] As long as the information was not personal. Let me elaborate. There's been a big blow back. How old are you interviewer two?

**Interviewer two** [00:06:00] I'm 24.

**Interviewee six** [00:06:02] OK. Your terminology is probably different than mine is because I'm many times older than your age. But there was a significant blow back with Integrity Beef. And I'm on the board of directors probably at the time I was a vice president (Should I rephrase this to not personally identify him and say just an active member in the leadership of Integrity Beef?) But at that point in time, we were asked to provide information about our retirement accounts, our C. Ds, our stock investments that did not go over well. If your question is only about expenses and the income related to raising cattle, I had no problem providing that information.

**Interviewer one** [00:06:42] Let let me jump in on that. I'm just curious why why was Integrity Beef interested in that other kind of more personal information? Do you know?

**Interviewee six** [00:06:51] Yes. The reason why is there were some and I'm going and I and I'm a little I think a lot of people had had their feathers ruffled significantly over the McDonald's project. That's a different topic for maybe a different day. But we when initially was originally introduced, an economist, and I'm going to say Noble back then, I think it was Noble Foundation. But you know what I'm talking about.

**Interviewer one** [00:07:20] Yes.

**Interviewee six** [00:07:21] Okay. An economist came forward at one of our meetings and said, this is what we're going to need. Well, there was such a massive blowback from everybody. You're not we're not going to tell you where our investments are, our stock portfolios. And the economist was shocked that we would be upset about that. And I likewise for obvious reasons. The economist was later told to cool it and that that information was not needed.

**Interviewer one** [00:07:57] Well, when you say the McDonald's project, what do you mean?

Theme BB McDonald's Project and Integrity Beef

**Interviewee six** [00:08:03] Well, and I use McDonald's as the main plate of the of the of the event where our cattle were supposedly put into this program. And there was a lot of traceability involved. ???Changed??? and then they were sold, you know, at the sale or private treaty here at the ranch. I understand that there may be a more technical name, common usage among the ranchers is just McDonald's project.

**Interviewer one** [00:08:37] OK. And I think that's actually the project we're interested in. So, it may be that some of y'all are talking about both the McDonald's project and maybe the Integrity Beef at the same time. Does that sound?

**Interviewee six** [00:08:52] And that's what I am I may owe you guys an apology because I thought you were calling about the McDonald's project, which which, you know, obviously was help orchestrated by certain individuals at Noble Foundation slash Integrity Beef.

**Interviewer one** [00:09:14] Right. OK.

**Interviewee six** [00:09:17] I hope I'm not making this up I may be making this far more confusing than you y'all.

**Interviewer one** [00:09:21] No, no. You're actually you're actually being very helpful because that's an important clarification. We and maybe that we're using and we're thinking of some words in one way and the people interviewing are thinking of a different way and that's definitely and that's that's very important. So, you think most people are referring to it as the McDonald's project?

**Interviewee six** [00:09:43] Yes. Integrity beef is all inclusive. For those of us that are members, I'm assuming you would only be talking to members of Integrity Beef. Well that's a misstatement on my part. The Integrity Beef members that you speak to view Integrity Beef as a very valuable organization, whereas McDonald's is merely something that Integrity Beef helps push down the road.

**Interviewer one** [00:10:17] OK, gotcha gotcha. And so, in that, can you briefly we're familiar with the McDonald's, a little familiar with Integrity Beef product project. Is is that the one where they're marketing you bring? How were the cattle marketed? And what most people called Integrity Beef project.

Theme BB McDonald's Project and Integrity Beef

**Interviewee six** [00:10:43] OK, in that in not in any particular year. OK. And again, I can and I think that I'm I'm relatively, obviously an NRI employee is far more knowledgeable then I'm because he's the executive director. But having been on the board of directors for 10 years, I've got some working knowledge. And so, with that said, Integrity Beef is an organization of about, is a separate entity under the umbrella of Noble. It is a tax-exempt entity set up with all the proper protocols. The purpose of it, the mission statement is to improve cattle production and educate ranchers as to proper cattle operations. And, you know, in that mission statement, you will see and also about economic concerns and proper treatment of animals, et cetera. Again, I apologize if I'm giving you more information.

**Interviewer one** [00:11:45] No, no, this is very helpful. I appreciate the specificity.

**Interviewee six** [00:11:50] Ok. Well, the the forty-four or forty-six ranches that are in the organization, we all have to comply with certain protocols. Number one is in no in no significant order here on these. You have a 90-day breeding season. Your bulls, there are eight different breeds that the Bulls can be a member of this Red Angus, I could go on and on, Charolais. The bulls have to be in the top 20 percent for weaning weight and yearling weight. That's it. Now we push and recommend top 20 percent for birth weight, especially with the Charolais Bulls because of the historical problem with their weights. Now the bulls, the calves that are born have to have certain health protocols, certain shots. The shots are given periodically during the life of the animal, while the animals are on the ranch, animal being the calves. They all have to be knife-cut

castrated, cannot be banded. They cannot have a horn or scur. They have to be healthy. They have to be not be lame, and they can't be dinkers. I don't know if that's a terminology, but, you know, it can't be a sorry ass looking calf. Then we're allowed to sell those just how we want to take them to the local sale barn. However, because of a reputation that hopefully these calves are gaining, we command a little bit of a premium. And so, the first week in November, and it was previously up to last year, the first week in December, we would have a sale, a dedicated sale at El Reno, Oklahoma City West. And they would we would the ranchers involved would get two to three thousand cattle up there that were basically all identical. You know, the ???ways ??? they would be grouped by weight, now that now they are grouped by ranch. But anyway, they are sorted and sold as an animal with all of this shot protocol, PI negative, sires being much like I alluded to earlier, and we found that they bring a premium.

**Interviewer one** [00:14:43] OK. And as part of this were y'all did y'all were y'all regularly comparing like the performance of different people's cattle to the to the group as a whole?

**Interviewee six** [00:14:59] Yes. If you wanted to provide that information, and a lot of the time I think truthfully most people wanted to provide the information, but God dang it, there's only so many hours in a day.

**Interviewer one** [00:15:12] Yeah. Yeah, I see what you mean.

**Interviewee six** [00:15:15] And so we did the best. My wife is a veterinarian. You know, I've got training that allows me to keep records. I've got teenage kids who help a lot with the computers you know that's all over my head, most of it. So, we were able to provide a lot of the information as far as the cattle. I mean, we weigh them, we've got, you know, hydraulic scales and hydraulic chutes and we weigh our animals. We monitor that. And if that information is provided by ranch, then you get a feedback as to, you know, us compared to the next guy.

**Interviewer one** [00:15:57] And do you get any as far as the Integrity Beef separate from the McDonald's project? Are you getting information back on carcass quality?

**Interviewee six** [00:16:10] Oh gosh, no. We did in the McDonald's project.

**Interviewer one** [00:16:15] Yeah. So that's the one we are interested in. And I'm so grateful for you being specific about this because it tells me we need to develop a better upfront narrative to specify what we're talking about.

**Interviewee six** [00:16:31] OK. I mean and again I want to stress to you, I'm not all knowledgeable.

**Interviewer one** [00:16:38] Sure.

**Interviewee six** [00:16:39] And all I can do is just give you know a reaction to your question.

**Interviewer one** [00:16:45] Yeah, and that's all we ask.

**Interviewer two** [00:16:47] Yeah, that's all we ask.

**Interviewer one** [00:16:48] OK, well well thanks so much for that. Interviewer two, you can continue.

**Interviewer two** [00:16:52] OK. Well that really did help specify things. What information passed up the supply chain did you find useful?



## Theme A Information Sharing and Theme B Issues with the Information

**Interviewee six** [00:17:02] Carcass data. Extremely. It's somewhat misleading how we compare to other ranches. Labor costs, say one of the defects in the system is terminology. Example, what were my labor costs in raising these animals? Well, I put down what I charge per hour to a client, 200 bucks an hour? No. Well, I put down zero per hour labor costs. Other people figured 30 or 40. There was never a uniformity or they're never definitions for some of the simplest things. Hay cost, is it the cost of production or is it market value of the hay that you fed? So that's the bottom line was getting data as to how other ranches do in comparison what you do is somewhat misleading because nobody could ever, nobody used the same definition of a very common term labor, vet supplies, med expenses. You know, I've never paid a penny after I married my wife, I never paid a penny for vet service.

**Interviewer two** [00:18:20] Makes sense.

## Theme A Information Sharing

**Interviewee six** [00:18:22] Well, but, you know, so it's misleading. The information that we got that I think most people really benefited from we did was a carcass data, because the following years we can say, hey seventy nine percent of our animals in a two-year period are were choice or prime. The yield rate now 85 percent, the yield was, you know, 62 percent. That's the data that helped us.

**Interviewer two** [00:18:56] That makes sense. How you how do you think the issue of creating more uniform definitions can be addressed? And who would be in charge of dictating those definitions and defining that?

## Theme B Issues with the Information

**Interviewee six** [00:19:10] Me. Isn't that a hell of an answer? I have to elaborate. I was so disgusted with our results. I got with an employee of Noble and I assume y'all you know who he is.

**Interviewer two** [00:19:24] Yes sir. I I went to the Integrity Beef meeting in March. I believe it was a quarterly meeting and I met him there.

**Interviewee six** [00:19:34] Well, I had a state playoff basketball game for my daughter so I didn't go to that meeting. But anyway, no I was so irritated at how words were misused or misunderstood. I told the Noble employee, you know, I will fix this, best of my ability and he and I spent hours and hours taking all of our Integrity Beef forms. And, you know, we asked fill in the blank, you know, your labor cost, your vet cost, your vet supplies, da da da. We then created on the next page a definition of everything, trying to get uniformity. So, when I say when you ask who can do that? Well, I did it, along with him. It is still needs to work in progress but all the forms have been updated based on our attempt to get uniformity and answers.

**Interviewer two** [00:20:32] That that makes sense. And what what information, you may have already touched on this, did you not did you not find useful?

## Theme A Information Sharing

**Interviewee six** [00:20:41] Oh, information about the other ranches. Again, you know, it's a wide area geographically speaking. You know what they provide. What they supplement in minerals or engrain may not be necessary for us. You know, their travel, their transportation expenses, getting

to the sale. I could care less about, you know. So, there's a lot of that information. Again, the thing that I really was interested in was carcass data. And that's what's so difficult to get.

**Interviewer two** [00:21:13] OK. What steps were taken to make you feel comfortable sharing information about your operation?

Theme D Steps Taken to Make Cow-Calf Producers Comfortable Sharing Information

**Interviewee six** [00:21:22] Oh, some assurances that they would not be shared with the Internal Revenue Service.

**Interviewer two** [00:21:30] That that makes sense. Were those assurances given?

**Interviewee six** [00:21:34] Yeah. But as I told them, if you get a subpoena to release these records, you're gonna release them.

**Interviewer one** [00:21:42] Let me ask you about since your lawyer is is there anything you can tell us about, like, you know, people being able to get a subpoena or something like that that would make programs like this, cattle producers would be fearful of entering into something like this.

Theme D Steps Taken to Make Cow-Calf Producers Comfortable Sharing Information and Theme C Cow-Calf Producers Willingness to Share Information

**Interviewee six** [00:22:06] And again, without getting into political affiliation. I think I think generally the people in the country are a little bit more conservative than those in the city. You know, much like OSU may be a lot more conservative than University of Texas. With that being said, that's a very broad-brush statement. But any information that an entity, Noble or anybody promises to keep privilege isn't going to be valid if they get a subpoena to release that information.

**Interviewer one** [00:22:44] OK. That's useful.

Theme C Cow-Calf Producers Willingness to Share Information

**Interviewee six** [00:22:46] But she's gonna say, oh, y'all promised them you wouldn't give this up. No. Now, there is nothing we do here that is anything but incorrect. But my problem was the IRS came out and audited this ranch for four or five trips out here to this ranch to make sure it's a working ranch. They thought it was a hobby. I got 350 cattle. I work my ass off when I leave the office, which is where I am right now, I work till dark five or six, seven hours. And they thought it was a hobby. You know, they totally irritated me. And it caused a lot of mistrust because anybody that walks out here can see this is not a hobby. I mean, I enjoy it. You don't have that many cattle and this many acres in trying to avoid payment of taxes. So, you have to know that about me, that I had a lot of distrust back at that point in time. And I still do. Not not I don't blame Noble or anybody. I just know that if if the government says we got to have information from all the ranchers because we're trying to determine so-and-so, Noble is going to pony it up, just like, y'all would.

**Interviewer one** [00:24:14] It never dawned on me that someone could suppose the interviews.

**Interviewer two** [00:24:20] Well, I can see why you are upset about that. Yeah, that is something to think about. And if the pilot project were make permanent, over let's say, the next five to 10 years, would you continue to participate in it?

## Theme E Will Cow-Calf Producers Continue to Participate in the Integrity Beef Sustainability Pilot Project?

**Interviewee six** [00:24:35] Especially if I can control my wife's anger. Yes, if you ask me personally, yes. But I think there are significant changes that need to be made.

**Interviewer two** [00:24:52] Could you elaborate on some of those significant changes other than the one that you already mentioned?

## Theme F Issues with the Integrity Beef Sustainability Pilot Project

**Interviewee six** [00:24:58] Yeah. The ranchers got screwed. OK. Let me tell you how it happened. And from what I understand, an employee of Noble saw it coming but couldn't convince anybody of it. I'll just use names. And if I offend somebody by using names, it's just easier to use names. Hey suddenly I can't think of his name. But there was one buyer. OK. The project was set up so that a representative would come out and bid on our cattle. They would pay if they bought off the ranch and extra let's just say fifteen dollars. OK, what whatever. OK. They would pay extra if we sold private treaty off the ranch or we could then or if we chose not to do that, we could go ahead and sale in the sale in Oklahoma City. Well, what was discovered was that the guy that came out to bid cattle, underbid every one of them. You could look at this CME, which is, you know, questionable if it's a good index or not. But he bid less than CME, CME on everything. Well, the reason why he did was because he knew and let's just use this as an example and understand the numbers I'm using are only for an example, but not representative of anything. Let's assume he bid 800 dollars for each animal. He knew that we're gonna get another 50. If we sold to him, we would get 50 from the project from from the McDonalds project. So, he didn't bid what they were worth. He bid eight hundred knowing that we would get an extra 50 and they were worth 840. OK. He knew the cattle were worth 840. He bid 800. Knowing that, we knew we'd get an extra 50. And we knew when we added fifty and the eight hundred, we'd get 850, which is ten dollars more than what they were worth.

**Interviewer one** [00:27:08] Kind of kind of like when a store increases prices and then has a 50 percent off sale.

**Interviewee six** [00:27:16] And an employee of Noble and as soon as it started, we were all instructed. We were it made it was available to us that when they come out and bid on your animals immediately call two employees of Noble and tell them what the bid was. And then we will tell you if it's good or bad deal. OK. Well, immediately it was, gosh, they way under bid. But if you do sell to them, you're going to get this extra 50. So, who really benefited from the project? Yeah, the ranchers a little bit, but it was the middleman that bought them cheap and then could sell them. The bonus that we were supposed to get really didn't go to the rancher. It went to packer? I don't know, the feedlot? I'm not sure where it went. That was the gripe. And let me tell you, it got pretty testy. Integrity Beef because there's a lot of people far more outspoken than I am. I was one of the timid ones. People really pissed because, you know, we had promoted this. They were using Integrity Beef as a nameplate on the project. And then we find out that a well-connected person, and I'll be honest with you, well connected person with Noble Foundation, sold a whole bunch of animals. Like hundreds of animals got paid the project money and the animals did not qualify. And you think that's a bunch of bull? Let me tell you that can be substantiated. What what happened was our animals had to have all of these credentials weening, hell they all had to be weaned of seventy-five days. They had to have all and that's one of the things I mentioned earlier, for us to sell our animals have to be weaned seventy-five days. If you wean them 74, you can't sell them under the name Integrity Beef, those are the rules. OK, McDonald's again, whatever the project, promoted that they were buying all of these Integrity Beef animals.

There is somebody at Noble who had hundreds of head of cattle that had only been weaned 60 days in questionable shot protocol. He was able to work his cattle into the system, a premium that was intended for the Integrity Beef folks. And when the big stink hit the fan on that one, it was said, well, they wanted to have another test group. OK. If they wanted to have another test that all of the publications, all of the advertising about being Integrity Beef cattle. So anyway.

**Interviewer two** [00:30:14] Yeah, I I can understand why that would be a major gripe and a major issue for ranchers.

**Interviewee six** [00:30:21] I think everybody was, you know, we play by the rules. I had some calves that had gotten out for a few days and gotten back to their mommas, day or two. I didn't sell them because they weren't weaned for 75 days. You know, I had some calves that we had bought their mamas as heifers and they were bred to low birth weight Angus Bulls. But the bulls were not the top 20 percent for weaning weight. They were like 22 percent. I didn't sell those calves in the program. You know, I sold them just to a sale barn. So, you know, all of us that play by the rules and are somewhat offended when other people didn't have to play.

**Interviewer two** [00:31:06] Yeah, that makes that makes all of all the sense in the world. Why have rules if not everybody is going to follow him and there's no repercussions for them?

**Interviewee six** [00:31:15] I mean and I know one guy I don't know him but an employee of Noble mentioned his name, that dogs or something got in. He weaned them on like seventy-seven days in advance. Well, 3 or 4 days into the weaning period, dogs got in, chased the calves, they broke through a couple of fences and he got them back. But he could only wean them 70 days. And an employee of Noble said, I'm sorry. You can't you can't sell. You can't be part of the project. OK. But you can ask you can ask some people at Noble; they will tell you who it was that was able to.

**Interviewer two** [00:31:53] Okay. And then now kind of shifting gears a little bit. Do you believe the cattle industry will begin adopting a traceable beef supply chain on a large scale?

**Interviewee six** [00:32:03] I hope they do, actually yes, I do think it's coming. And I hope it does.

**Interviewer two** [00:32:11] Why? Why do you? Why do you think the signs are there that it's coming?

**Interviewee six** [00:32:16] Because. Well, I think. Interviewer two ask that question again.

**Interviewer two** [00:32:22] Do you believe the cattle industry will begin adopting a traceable beef supply chain on a large scale?

**Interviewee six** [00:32:29] Yes. And then the next question was?

**Interviewer two** [00:32:34] Why do you why do you believe that basically? Why do you think it's going there is going to be a large-scale traceable beef supply chain?

**Interviewee six** [00:32:42] OK, hold on. I've got a kid out killing grasshoppers and weeds.

**Interviewer two** [00:32:47] No problem.

**Interviewee six** [00:33:03] It's amazing when you get a 15-year-old kid is suddenly is interested in girls and driving. They need money now.

**Interviewee six** [00:33:14] It's a job for me to find him stuff to keep him busy.

**Interviewee six** [00:33:19] I'm sorry, interviewer two. What was that? Why do I think it's coming to that?

**Interviewer two** [00:33:23] Yes.

Theme N Managing Food Disease Outbreaks and Theme L Large-Scale Traceability Might Force Some Cow-Calf Producers to Leave the Industry

**Interviewee six** [00:33:25] I think that the consumer is going to demand it. I think that first off, I think it's good that we can trace. I think if we ever have an outbreak of mad cow again, it's going to be nice if we have it. But I think the consumer wants traceability. And I think traceability weeds out some of the inferior cattle. If you manage your ranch in such a way that traceability is available, then you're less likely to have a half assed operation because people don't want to tag animals. People don't wanna, you know, EID them. People don't want to do that. And I just think they should. It protects the cattle industry.

**Interviewer two** [00:34:22] That that makes sense. Do you believe a traceability system is necessary to manage disease outbreaks like you already mentioned, foot and mouth disease?

Theme N Managing Food Disease Outbreaks

**Interviewee six** [00:34:31] Yes.

**Interviewer two** [00:34:32] OK, why? Why would you why would you say this?

**Interviewee six** [00:34:40] Well, I think the question is self-explanatory. Do I think it is necessary to manage the outbreak? Yes, that is a reason to manage the outbreak and to instill confidence in the ultimate consumer. You know, the last thing we as a cattle industry need is for the consumer to lose faith in the product that we're producing. And so, you know, if there is a problem and they can isolate to people or ranch in the swamps of Louisiana, that's great.

**Interviewer two** [00:35:13] Yeah, that makes sense. And now I want you to think about a hypothetical large-scale traceable beef supply chain. And we can imagine a successful voluntary program that cow-calf producers like yourself find favorable. But we can also imagine a voluntary traceability program that cattle producers like yourself do not find favorable. If the beef industry did adopt a traceable supply chain on a large scale that was viewed favorably by the cattle industry, what would it look like?

Theme L Large-Scale Traceability Might Force Some Cow-Calf Producers to Leave the Industry and Theme K Attributes of an Effective Large-Scale Traceability Program

**Interviewee six** [00:35:48] Well, I think the small producer be out of business number one. Make it traceable, you got to tag these animals. A lot of people don't even have working pens. A lot of people, you know, to have a lot of these animals, you know, are half ass wild, now ours aren't because we get rid of them. But a lot of people don't have the facilities properly care for the animals, which in and of itself would mean tagging them. Now, could a tag be done at the sale barn? I don't know. But I think that a lot of people, when the government gets involved, they just go off onto raise something else. You know, I just don't think they'd be messing around with the cattle because, you know, for traceability soon you're going have to have electronic tag in them. You got to put it in. You've got to keep the data. You've got to be able to attribute it to a particular animal, and it's just a lot more work than most people want to do. You know, when you

know that if you've got a sorry animal and everybody knows that it came from you, you know, maybe that will either cause you to stop producing the sorry animal or you getting out of the business.

**Interviewer two** [00:37:07] Yeah. It will basically force you to adjust.

**Interviewee six** [00:37:10] That's right. You know, I think some people are incapable of adjusting.

**Interviewer two** [00:37:16] Do you believe do you believe that a large amount of those producers would adjust or do you think that more of them will go out of business?

Theme L Large-Scale Traceability Might Force Some Cow-Calf Producers to Leave the Industry

**Interviewee six** [00:37:25] Well, in Texas, I've I've read this and I may be horribly wrong. The majority of ranches in Texas are like only 75 acres. And that data is with the cattle Texas Southwest Cattle Raisers. You know, 90 percent of the cattle were raised by 10 percent of the ranches. I think something like that. So, if though, if that data is accurate, I think the guy that's got four or five head of cattle is just going to say it's not worth it and he'll start raising chickens or something.

**Interviewer two** [00:38:03] OK. That's that's understandable.

Theme W Cattle Industry not a Profitable Business and Theme L Large-Scale Traceability Might Force Some Cow-Calf Producers to Leave the Industry

**Interviewee six** [00:38:05] And see a lot of people have it, do not make it. Y'all know this better than anybody. You do not make money to speak of raising cattle. I think a lot of people raise them for their ag exemption. You know, in Texas now, if you've got a cow on a hundred acres of land, then you've got an ag exemption on the value of that land. I think that a lot of people, if you make raising cattle more difficult with record keeping, etc., a lot of people to get their ag exemption will put a beehive out there or they'll let it go back to nature. You know, whatever you can do to maintain your ag exemption. I cannot speak for Oklahoma. I don't know what their rules are.

**Interviewer two** [00:38:52] That's that's understandable. I don't expect you to do that. If the beef industry adopted a traceable supply chain on a large scale that was not viewed favorably by cow-calf producers, what would it look like?

Theme I Cow-Calf Producers Concerns about a Traceability Program

**Interviewee six** [00:39:11] Too much data, too much. If we were, you know, at what point does a cow tracing begin at birth? You know, to tell us that, we got to say who the daddy is. Who the momma is not difficult but who the daddy is could be a real problem. If you're running six or eight bulls with a few hundred head of cattle. I could see that being a requirement but yet be very difficult to comply with. I think providing information to federal authorities on a regular basis would cause people to puke a little bit. You know, I think there's so much distrust of the government right now that there is a hesitancy to provide too much information.

**Interviewer two** [00:40:07] That makes sense. And now we'll get to ask you a little bit more specific questions about a traceable supply chain. You were just talking about the government. If the beef industry did adopt a traceability system, you think it should involve the USDA?

## Theme M Role of the USDA

**Interviewee six** [00:40:22] Yes.

**Interviewer two** [00:40:23] What would be the USDA's role in it?

**Interviewee six** [00:40:25] Straight uniformity of the tracing, if you left it up to the different states, you're going to be all over the place. And there's got to be some. I think the various states, assuming that most states have some cattle production, you'd have, what, 50 different protocols. And for it to be effective, I think it needs to be under an umbrella. And the umbrella ought to be managed by the USDA. And I would hope that they're not so politically inclined as to try to placate some of the people that don't know one end of a cow from another.

**Interviewer two** [00:41:07] Yeah, that makes sense. You definitely don't want those people who don't know a lot about the cattle industry.

## Theme C Cow-Calf Producers Willingness to Share Information

**Interviewee six** [00:41:14] I think that's the fear. You know, just as a as an aside, the IRS agent that kept coming out here to look at the places wanted to see six Angus Bulls. And I had the hardest time explaining to her that ain't a bull, look underneath it.

**Interviewer one** [00:41:32] Are you serious?

**Interviewee six** [00:41:37] I'm dead serious. At some point in time, I said look lady ma'am. I said the kids call these things hangy downs. I said over there are some hangy downs. We need to find five more animals with hangy downs like that.

**Interviewer two** [00:42:00] That's that's that's funny.

**Interviewee six** [00:42:01] I guess I'm going to get arrested after y'all.

**Interviewer two** [00:42:09] Well, what what information about you and your operation do you feel comfortable sharing with others in a beef traceability system?

**Interviewee six** [00:42:19] Oh, whatever the expenses related to the cattle operations, whatever time is involved, if the request for information is limited to the income expenses, time management of the cattle operation. I have no problem sharing that. I will not provide information about investments, rental property, C.D.s. That's got nothing to do with anything.

**Interviewer two** [00:42:50] That's understandable. And I I agree with that. And then if the beef industry adopted a traceability system such that cattle producers felt compelled to participate in order to find buyers. Do you think that might alter the market power of cattle producers as compared to the buyers of live cattle? And if so, how?

**Interviewee six** [00:43:12] Hey, interviewer two, say that again. That's kind of a lengthy question.

**Interviewer two** [00:43:14] Yes, I know. If the beef industry adopted the traceability system such that cattle producers felt compelled to participate. In order to find buyers, do you think that might the market power of cattle producers as compared to the buyers of live cattle?

## Theme P Traceability Altering Market Power

**Interviewee six** [00:43:34] Yes, I think the answer that supply and demand that if you set up that regime or those protocols, then you're going to have less cattle in the system. And I think that that causing people to meet certain criteria will cause those people who produce less animals or get totally out. Therefore, that affects the supply, which therefore affects, you know, basic supply and demand theory.

**Interviewer two** [00:44:09] Okay. Do you think the cattle industry will become more like the swine or the broiler industry where it's more contract farming?

Theme Q Risk of the Cattle Industry Turning into the Swine and Broiler Industry

**Interviewee six** [00:44:18] God, I hope not. No, I don't think so because I think we've seen what's happened in those other industries. I just, you know, I don't know anything about raising chickens other than I think they're all in one big chicken house. And, you know, I don't know anything about pigs other than we shoot the dang things out here, you know. But I understand they don't just run rampant all over the place. I think the cattle industry is unique enough where it takes a lot of acreage, a lot of time, effort. I just don't think you're going to see in the cattle industry what we've seen in the poultry and swine industry. I just don't.

**Interviewer two** [00:45:08] So you don't think a traceability system is synonymous with contract farming?

**Interviewee six** [00:45:15] No I do not.

**Interviewer two** [00:45:15] OK. Do you think consumers care if the beef industry adopted a traceability system?

Theme O Do Consumers Care About Traceability?

**Interviewee six** [00:45:22] Yes. Especially if they were told they cared. And that's somewhat of nonsensical statement. But I think the consumer can be convinced that, you know, I question the validity of the information they would be getting. But the consumer could be convinced very easily. They shouldn't eat, eat anything unless it was subject to traceability.

**Interviewer two** [00:45:52] Go ahead now.

**Interviewee six** [00:45:54] So I don't know. I kind of got sideways with your question. I don't know that I answered it.

**Interviewer one** [00:46:01] No, you did.

**Interviewer two** [00:46:03] That was a that was a really good answer. I just had a little bit of a question about it. How would you make sure that you mentioned a little bit about the validity of the information, how would you make sure that consumers got valid information about beef?

**Interviewee six** [00:46:19] But all I'm doing is referring to what we suspect. You know, if you flip on Fox News, you hear the facts, you flip on MSNBC you hear the facts are all different.

**Interviewer two** [00:46:32] Totally different.

Theme O Do Consumers Care About Traceability? and Theme T The Average Person Doesn't Know A Lot About the Cattle Industry



**Interviewee six** [00:46:34] So, you know, I think whoever is disseminating the information is going to disseminate information that is compatible with their ultimate objectives. And then I think the public tends to relish bad news. You know, if if the news was nothing but good, everybody's married, everybody's happy, and nobody robbed the store, there'd be nothing to put on the news. So, I think the news has to be negative or people won't listen to it. So, I think there's an inclination to scare people where they will react. And I just worry that there's going to be bad information given to the public. But whatever the media wants us to do or think, they're going to try to make us think that way. And people have no idea what it takes to raise animals. None.

**Interviewer two** [00:47:34] That that's understandable. I would say most people some some people do. But most most people do not.

Theme T The Average Person Doesn't Know A Lot About the Cattle Industry

**Interviewee six** [00:47:40] But I misspoke and I apologize. I misspoke. You know, I just think that some of them out here. And, you know, there's a real nice place what the hell do you do all the time. All the cattle do is go out there eat and poop. Yeah. All I do is watch that.

**Interviewer two** [00:47:59] Well, that that completes the questions we have prepared. Thank you so much for participating. Do you have any comments you would like to add or to suggest any questions we didn't ask that you think we should have?

**Interviewee six** [00:48:12] No. I think in this I don't know where I am in the list of people whether I'm the first or the hundredth that you've talked to. But I think some of your questions need to be more specific and succinct. I think they are subject to different interpretations.

**Interviewer two** [00:48:32] I think I think that was the main goal. We were trying to ask open-ended questions so so we could get more open-ended answers.

**Interviewee six** [00:48:43] Ok so people like me can just ramble.

**Interviewer two** [00:48:44] That was that was kind of the one that was kind of all kind of our goal to see what each individual producer would talk about.

Theme W Cattle Industry not a Profitable Business

**Interviewee six** [00:48:52] Yeah, well, and interviewer two I do not mind helping y'all. I think the cattle industry is hurting. I think it needs a lot of improvements. So, you know, maybe in some small way I can help kick the can down the road. You know and I appreciate what guys like y'all are doing. You know, I know it's it's a way for you to get out of school. But still, hopefully, you know, you are y'all two are pushing the can down the road to where we can get something positive in the cattle industry. As you know, the cattle industry hard stay in cuz costs go up and the commodity price are flat or decrease. So, you know, there's a lot that needs to be done.

**Interviewer two** [00:49:38] Well, yes, and thank you again. And you surely helped me with as I write my thesis. One last thing. We do want to get your mailing address so we can send you a hundred dollars in cash and you don't even have to write it on your taxes or anything like that.

**Interview of Interviewee Seven**

**Interviewee seven** [00:00:36] Hello.

**Interviewer two** [00:00:37] Hey, is this interviewee seven?

**Interviewee seven** [00:00:40] This is.

**Interviewer two** [00:00:41] Yes, sir. This is interviewer two, the grad student from OSU studying ag econ.

**Interviewee seven** [00:00:47] Yes, sir.

**Interviewer two** [00:00:47] Is this still a good time to interview you?

**Interviewee seven** [00:00:50] Yes, sir.

**Interviewer two** [00:00:51] OK. Awesome. Like the email said, I'm writing my thesis on beef traceability, and I'm just interested in learning about your experience in the Integrity Beef.

**Interviewee seven** [00:01:01] You probably already know more than I do.

**Interviewer two** [00:01:06] Well, we'll gonna see we'll gonna see about that. But we're just trying to get your experience in the Integrity Beef Sustainability Pilot Project coordinated with McDonald's and Noble and just about beef traceability beef traceability in general. And thank you again for granting us this interview. We are recording this interview and typed audio transcript would be prepared for you so you can review it and look at it. And none of you all of your information will remain confidential and none of your personal information will be used. Is that OK?

**Interviewee seven** [00:01:42] Yes, sir.

**Interviewer two** [00:01:44] Awesome. And before we get started with the questions, I just want to share with you our working definition of what we mean by a traceable beef supply chain. And a traceable beef supply chain is one where cattle and its beef can be traced from the farms on which the cattle are raised throughout the beef supply chain till the point of consumption. While a single hamburger patty cannot be traced to the individual cattle from which it is made, we think that's a little bit too unrealistic. It can be traced to a collection of farms. We are concentrating on a voluntary system, not a mandatory system. So, producers have the choice whether they want to participate in it or not. And in this system, information such as farm production practices is passed down the supply chain, from producers to meat packers to retailers. Information such as carcass quality is passed up the supply chain from meat packers and retailers back to cattle producers. Such a traceable system might operate through open markets through vertical integration or something in between. Does that make sense? Do you have any questions about that?

**Interviewee seven** [00:02:47] No sir.

**Interviewer two** [00:02:48] Awesome. And then let's get started with the questions. So, the first couple questions are about the Integrity Beef Sustainability Pilot Project. And what did you like about the pilot project compared to the way you normally market your cattle?

**Interviewee seven** [00:03:05] Well, I've only got to do that once. The other time that I always went to the sale, you know, the Integrity Beef sale. But one time they came and bought them right off the ranch, you know. And it is it's either way for me. I mean, there we still do the same things, you know, to get them prepared for that. So, it's either or for me.

**Interviewer two** [00:03:43] OK. So, there is really no difference you saw between doing at the Integrity Beef and then selling it directly off the ranch.

## Theme F Issues with the Integrity Beef Sustainability Pilot Project

**Interviewee seven** [00:03:52] Right. I mean, I would personally probably see because we had to weigh them and everything right here, you know, and I'll have to haul them somewhere to get them weighed. So, it's just as easy for me to take them to the sale.

**Interviewer two** [00:04:11] Yeah, I don't I don't blame you. Takes a lot of work off your end if you just do that.

**Interviewee seven** [00:04:16] Yeah. You know, if I was set up that I had scales on the ranch, it would be a good thing. But I'm not set up that away.

**Interviewer two** [00:04:27] Yeah, that makes sense. What did you not like about the way you typically market your cattle?

**Interviewee seven** [00:04:42] The with Integrity Beef we. Are you talking about Integrity Beef or the other the pilot program?

**Interviewer two** [00:04:54] I'm talking about how what did you not like with the pilot project compared to the way you normally sell your cattle?

**Interviewee seven** [00:05:01] Other than just having to take them off of the ranch to get them weighed. And, you know, we we tried to estimate their weight. You just can't. I'm not good enough at guessing their weights. So, we had to haul them to weigh them. You know that that's my only with the way I'm set up that's my only problem with it, you know, is every time you load them on a trailer and have to move them somewhere, you risk hurting one and all that. So that's my only hang up, is that I have to move them around to a different ranch to weigh them. But it would be good if I was set up where I can weigh them and then load them on a truck and send them out of here.

**Interviewer two** [00:05:52] Yeah.

**Interviewee seven** [00:05:53] That's the only bad part. What I'm trying to say.

**Interviewer two** [00:05:56] Okay. Yes, sir. That makes sense. And that's totally understandable. And how did you feel about sharing information about your operation and cattle with others in the pilot program?

**Interviewee seven** [00:06:09] I think it's good. You can get feedback from other places, you know, and try to figure out what's better for the program and all that.

**Interviewer two** [00:06:22] Absolutely. What what information passed up the supply chain to you did you find useful?

**Interviewee seven** [00:06:33] I don't think that I ever really ask any questions about it. I just I just think it could be good. You know, I really didn't get much feedback on it.

**Interviewer two** [00:06:49] Why why didn't you get as much feedback as what you hoped, do you think?

**Interviewee seven** [00:06:57] I just didn't ask for it myself.

**Interviewer two** [00:07:00] OK, so so what information did you not did you not find useful? Was it all because you didn't really get a lot of information back?

**Interviewee seven** [00:07:12] I, you know, I just personally didn't have any questions about it.

**Interviewer two** [00:07:21] That that makes sense and then what steps were taken to make you feel comfortable sharing information about your operation?

Theme D Steps Taken to Make Cow-Calf Producers Comfortable Sharing Information

**Interviewee seven** [00:07:34] You know, they just explained what we were doing, you know, from start to finish, you know. And I just thought it'd be a good thing to be able to trace the cattle from start to finish. Basically, you know, in case something did happen they'd know where straight to go, you know, next.

**Interviewer two** [00:08:02] That that makes sense. And then if the pilot project was made permanent over, let's say, the next five to 10 years, would you continue to participate in it?

Theme E Will Cow-Calf Producers Continue to Participate in the Integrity Beef Sustainability Pilot Project?

**Interviewee seven** [00:08:12] Sure.

**Interviewer two** [00:08:13] Okay, why why would you continue to participate in it?

**Interviewee seven** [00:08:17] Well, I just you know, I think it's a good program and it it allows a buyer to come look at your cattle. And I think that those type people can come to the ranch and look at what you're doing and appreciate what all we have to do to get them ready to sell, you know, other than just sending them to the market. I think people would pay a premium to just get come buy them right off the ranch, is what I'm trying to say.

**Interviewer two** [00:09:07] That that makes sense and that's understandable. You touched on this a little bit. What aspects of the pilot program would you recommend changing?

**Interviewee seven** [00:09:22] I don't think that I would have any recommendations on changing anything right now.

**Interviewer two** [00:09:30] Okay, that's that's good to hear. Do you believe the cattle industry will begin adopting traceable beef supply chains on a large-scale level?

**Interviewee seven** [00:09:39] Yes.

**Interviewer two** [00:09:41] Okay. Why why do you think that?

Theme O Do Consumers Care About Traceability?

**Interviewee seven** [00:09:43] Well, I think in this day and time that that's something that's going have to happen. You know, I think people are going to require to know where their meat is coming from.

**Interviewer two** [00:10:02] Ok. That that that makes sense. And then I want you to shift gears a little bit. Suppose the beef industry does adopt a traceable beef supply chain. We could imagine a successful voluntary program that cow-calf producers like yourself would find favorable. We can also imagine a voluntary traceability program that cow-calf producers do not like. So, if the beef industry adopted a traceable supply chain on a large scale that was viewed favorably by cow-calf producers what would it look like?

**Interviewee seven** [00:10:41] I'm not sure I understand what you're asking me.

**Interviewer two** [00:10:43] OK, I'll try to explain it a little bit better. Sorry about that. So, if the beef industry adopted a large-scale traceability system, that's hypothetical. What would one that from the perspective of cow-calf producers such as yourself, would it be favorable to you?

**Interviewee seven** [00:11:10] So you're asking me how would it be favorable to the ranch?

**Interviewer two** [00:11:14] Yes, sir.

**Interviewee seven** [00:11:18] I just think that it would be favorable that you could be able to follow your cattle from start to finish if you choose to. And then if there was something wrong, on the other end, you know, just say there was something bad happened at the packer. If your cattle were fine, it would eliminate your cattle from whatever is going on in the packer, you know, everybody's cattle would be traceable. So, if something was wrong with somebody else's, it would eliminate you. Because, I mean, it could it could cut back on a lot of other problems. If something happened, you know, they could eliminate everybody that wasn't involved.

**Interviewer two** [00:12:22] That makes sense. When you say problems what do you what do you mean?

**Interviewee seven** [00:12:27] Well, I don't know. I'm just saying anything can go wrong there. You know, you hear about problems. But I don't have a specific problem. I'm just saying that with traceability you can eliminate everybody that was like if it pertained to one producer, you know, something going on with one producer, it would eliminate everybody else. If you had the traceability of everything and where they came from. You get what I'm trying to say?

**Interviewer two** [00:13:03] Yes, sir. I understand you're basically saying if an event did occur with a traceability system, you can trace it back to one producer and eliminate the rest that weren't involved.

**Interviewee seven** [00:13:16] Right.

**Interviewer two** [00:13:16] Absolutely. Who who do you think would be in charge of such a system?

**Interviewee seven** [00:13:21] Shoot. I have no idea.

**Interviewer two** [00:13:25] Okay.

**Interviewee seven** [00:13:25] I don't want to be.

**Interviewer two** [00:13:29] Yeah, I can, I can see that. That would be that would be tough.

**Interviewee seven** [00:13:33] I think that would be a good job for you.

**Interviewer two** [00:13:38] Well, if the beef industry did adopt traceable supply chain on a large scale that was not viewed favorably by by cow-calf producers, what would it look like?

**Interviewee seven** [00:13:54] I don't know.

**Interviewer two** [00:13:55] Ok. That's that's understandable and then what information about you and your operation do you feel comfortable sharing with others in a beef traceability system?

### Theme C Cow-Calf Producers Willingness to Share Information

**Interviewee seven** [00:14:07] I'm comfortable with sharing whatever whatever they come up with. If they if they decide, you know, that this is something they want to do I'm fine with whatever.

**Interviewer two** [00:14:20] OK, so you don't have any requirements or any preferences or anything?

**Interviewee seven** [00:14:26] No.

**Interviewer two** [00:14:27] OK. Do you believe a traceability system is necessary to manage disease outbreaks such as mad cow disease or foot and mouth disease?

### Theme N Managing Food Disease Outbreaks

**Interviewee seven** [00:14:37] Yes.

**Interviewer two** [00:14:38] OK. Why? Why do you say that?

**Interviewee seven** [00:14:40] That's more or less what I was trying to say a minute ago. You know, if there's a problem somewhere with traceability, you can eliminate all the other people that didn't have problems. You know, they can go right back to the ranch and everybody else could carry on with what's going on. And you can you could zero in on that one area.

**Interviewer two** [00:15:08] That that makes sense. Are you concerned when they do zero in on that one area and let's say your farm the one farm is a problem area? Are you concerned about liability for that one farm that they were punishment and stuff?

### Theme J Insurance Policy

**Interviewee seven** [00:15:23] Well, it be kind of bad if they zeroed in on me. You know, I think that, you know, if you've got a problem, you have to address it and figure out how to fix that problem. And I feel like that I don't know that you would be punished for it, but maybe they can help you correct the problem, you know. And I think that's the way things should be not not punished unless you're just doing stuff that you shouldn't be, you know, to cause those problems. You know, if it just happened to be something that just accidentally happened, you know, I don't think a rancher should be punished, but unless they're just absolutely doing things the wrong way on purpose. You know, but most people try to do the right thing.

**Interviewer two** [00:16:27] Yeah, that's definitely understandable. Most ranchers want to produce a good product and want to do the best work they can do. So, if the beef industry did adopt a traceability system, do you think it should involve the USDA?

### Theme M Role of the USDA

**Interviewee seven** [00:16:47] It would probably have to involve the USDA, but, you know, I don't know how to answer that. I don't know. I would think that they would have to be involved.

**Interviewer two** [00:17:02] OK, that makes sense. And then if the beef industry adopted traceability system such that cattle producers felt compelled to participate in order to find buyers. Do you think that might alter the market power of cattle producers?

### Theme P Traceability Altering Market Power

**Interviewee seven** [00:17:19] I think it can help the producer. They could, you know, they can go just like to McDonald's and say we're going to have this quality of cattle. And, you know, I think some companies would pay a premium to have a higher quality of beef.

**Interviewer two** [00:17:49] OK. Are you concerned at all that a traceability system might lead the beef industry to become more like the swine and broiler industry where it's almost like contract farming?

**Interviewee seven** [00:18:01] I don't know anything about that.

**Interviewer two** [00:18:03] Okay. And then do you think consumers care if the beef industry adopts a traceability system?

Theme T The Average Person Doesn't Know A Lot About the Cattle Industry

**Interviewee seven** [00:18:13] I think the average person has no idea about where their beef comes from that's just me. And the people that I think the average consumer has no idea where their meat comes from.

**Interviewer two** [00:18:33] That's that's understandable. Do you think like big corporations like McDonald's and Burger King care about a traceability system?

**Interviewee seven** [00:18:44] Yes.

**Interviewer two** [00:18:45] OK. Why why do you say that?

Theme O Do Consumers Care About Traceability?

**Interviewee seven** [00:18:48] Well, I just think they would rather know where they're getting their meat from. And just like we're talking about the mad cow disease, if they if that happened, they'd know where to go back to and stop getting meat from there or whatever, you know, excuse me, cattle from there.

**Interviewer two** [00:19:14] That makes sense.

**Interviewee seven** [00:19:15] I think traceability is something that's going to have to happen at some point.

**Interviewer two** [00:19:23] Why why do you why do you think that?

Theme O Do Consumers Care About Traceability? and Theme S Concerns About Importing Foreign Beef

**Interviewee seven** [00:19:26] I just think that today's consumers want to know. I mean, you know, like I was saying a minute ago, the majority of people don't know where their meat comes from. There there's meat being brought into the United States from other countries right now. And, you know, we don't know what they're doing over there with traceability people would know. I think people would pay a premium to know they're getting quality meat.

**Interviewer two** [00:20:04] OK, how do you think you help educate the consumers to know where their beef is coming from?

**Interviewee seven** [00:20:13] I don't know.

**Interviewer two** [00:20:15] That's that's understandable. And then that completes the questions we had prepared. Do you have any comments you would like to add or suggest any questions we didn't ask that you think we should have?

**Interviewee seven** [00:20:27] No, I don't think so. OK, well, that's that's good.

**Interviewer two** [00:20:31] Well, thank you again for participating.

**Interviewee seven** [00:20:34] Thank you for your time. I appreciate it.

**Interviewer two** [00:20:38] One last thing before I let you go. We do want to I do want to get your mailing address so we can send you a hundred dollars in cash for participating so you don't even have to write it off on your taxes or anything.

### **Interview of Interviewee Eight**

**Interviewee eight** [00:00:43] Hello.

**Interviewer two** [00:00:45] Hey, this is this interviewee eight?

**Interviewee eight** [00:00:49] It is.

**Interviewer two** [00:00:50] OK. Yes, sir. My name is interviewer two and I'm a master's student studying ag econ at OSU. Is this still a good time to interview you?

**Interviewee eight** [00:00:58] It is.

**Interviewer two** [00:00:59] Awesome. Well, thank you for granting us this interview. I'm writing my thesis on beef traceability. And I'm just interested in learning about your experience in the Integrity Beef Sustainability Pilot project coordinated with McDonald's and through Noble and about traceability in general. And and like the email said, we are recording this interview and a typed transcript will be prepared from audio files for you can review it. And then none of your personal information will be used it will all remain confidential. Is that ok?

**Interviewee eight** [00:01:34] It's.

**Interviewer two** [00:01:34] OK. Awesome. And before I get started with the questions, I just want to share with you what our definition of traceable beef supply chain is. Traceable beef supply chain is one where cattle and its beef can be traced from the farms on which the cattle are raised throughout the beef supply chain until the point of consumption. While a single hamburger patty cannot be traced to the individual cattle from which it is made. We think that's a little bit too unrealistic. It can be traced to a collection of farms. We are concentrating on a voluntary system, not a mandatory system. So, the producers have the option or the choice to participate or not. And in this system, information such as farm production practices, is passed down the supply chain from producers to meat packers to retailers, and information such as carcass quality is passed up the supply chain from meat packers and retailers back to cattle producers. Such a traceable system might operate, through open markets, through vertical integration, or something in between. Does that make sense? Do you have any questions about that?

**Interviewee eight** [00:02:35] No.

**Interviewer two** [00:02:36] OK, awesome. Let's get started with the questions and the first couple of questions are about your experience and Integrity Beef Sustainability Pilot project. What did you like about the pilot project compared to the way you normally market your cattle?



**Interviewee eight** [00:02:53] I didn't see any difference in how I marketed my cattle from one to the other.

**Interviewer two** [00:02:57] There is no difference between that and the regular Integrity Beef program?

**Interviewee eight** [00:03:03] No not for me.

**Interviewer two** [00:03:04] OK. Did you how did you feel about sharing information about your operation and cattle with other in the pilot program?

Theme B Issues with the Information

**Interviewee eight** [00:03:14] I thought it was a waste of my time, honestly. I got very little feedback back down to me and it didn't benefit me and my operation. By the time I got any information back about the quality of the calves, the bulls that I was using had both had ???feed??? problems and I had to change. So, it really didn't apply to what I was producing at the time. You know, as far as the carcass quality and so forth. So, I didn't see it help me at all.

**Interviewer two** [00:03:46] Okay, so how could that be changed where you get the information back quicker or can be more relevant to you?

**Interviewee eight** [00:03:59] I think you're asking the wrong person. I sent the information in as soon as I could. They just didn't send it back. They need to send it back sooner it was over a year before I heard anything from them. If I remember correctly, it may not have been it was a long time.

**Interviewer two** [00:04:15] That's basically what I was asking. I wasn't saying that you didn't send it in. I was saying, how do you think they could get the information back to you faster?

**Interviewee eight** [00:04:25] I don't know what their process was. You know, that was the first time they had done it. So, I'm sure that over time the process could be streamlined and improved. It just took too long to get the information back and it wasn't in a very usable format for me.

**Interviewer two** [00:04:43] Okay, that that makes sense. What steps were taken to make you feel comfortable sharing information about your operation?

Theme D Steps Taken to Make Cow-Calf Producers Comfortable Sharing Information

**Interviewee eight** [00:04:53] I don't remember any.

**Interviewer two** [00:05:01] And if the pilot project was made permanent, let's say over the next five to 10 years, would you continue to participate in it?

Theme E Will Cow-Calf Producers Continue to Participate in the Integrity Beef Sustainability Pilot Project?

**Interviewee eight** [00:05:09] Probably not.

**Interviewer two** [00:05:10] Ok other than what you already mentioned any particular reasons why you wouldn't?

**Interviewee eight** [00:05:17] I don't see any benefit to me.

**Interviewer two** [00:05:19] OK, that makes sense.

Theme B Issues with the Information and Theme F Issues with the Integrity Beef Sustainability Pilot Project

**Interviewee eight** [00:05:23] I'm marketing my cattle, you know, at an open auction. So, unless they're going to buy them directly at a price that into the into the program like they did one year, which is all they did for me. Unless they're going to buy them directly from me, there's no point in me giving anybody any information.

**Interviewer two** [00:05:50] That's that's understandable. Why do you think they only did that for the one year and then stopped?

Theme K Attributes of an Effective Large-Scale Traceability Program

**Interviewee eight** [00:05:55] I was told they didn't want to buy them from the ranch. The first year they bought them directly from the ranch. But there's a large number of us that produce a small enough. We don't we don't produce a pot load of steers and heifers so that they can the transportation of them was the logistics of it it was difficult to begin with and costly, I'm sure, for them. So, if we if we provide the transportation to El Reno, where they were selling them still are, they can buy what they want. I don't know who buys them. So, if it goes through an auction, I don't know if that they were bought into the program or not after the first year.

**Interviewer two** [00:06:33] That's understandable. And you may have already answered this, but if you can think of anything else, that would be good too. What aspects of the pilot program would you recommend changing?

Theme B Issues with the Information, Theme F Issues with the Integrity Beef Sustainability Pilot Project, and Theme K Attributes of an Effective Large-Scale Traceability Program

**Interviewee eight** [00:06:43] Well, just what I if they're going to do it, they need to buy all of our all of us let us, how would I say this, we need to know for sure when the cattle are sold, if they're bought into the program. And I don't think we were told that after after the first year. And that's what we know, to expect something back from them. If we're not going to be able to create a return client a client, they're not going to return to us and want to buy the beef again because of the quality that they see from the research, from the traceability, then it's a useless program to me.

**Interviewer two** [00:07:32] That makes sense. That makes sense because why go through the effort of traceability if there's not going to be premium attached to it.

**Interviewee eight** [00:07:41] Right. There's no return on my dollars just extra time and extra paperwork.

**Interviewer two** [00:07:46] I don't blame you on that. Do you believe the cattle industry will begin adopting traceable beef supply chains on a large-scale level?

Theme S Concerns About Importing Foreign Beef

**Interviewee eight** [00:07:54] Not till they address the the cattle coming in from other countries. That whole program needs to be changed before they talk to us.

**Interviewer two** [00:08:06] That makes sense. How would they go about changing that program?

**Interviewee eight** [00:08:12] As far as importing cattle?

**Interviewer two** [00:08:12] Yeah

**Interviewee eight**[00:08:14] Well, for one, if it's true that they're they're labeled beef produced in the USA or from the USA once from what I've heard because they're processed here or finished fed here, that needs to change. They're not raised here and born here. The consumer needs to know that. We need a fighting chance to give them the people that want to buy meat produced in the United States and a chance to buy it and know that's truly what it is.

**Interviewer two** [00:08:43] That makes sense. Now, I want you to shift gears a little bit. Suppose the beef industry does adopt a traceable beef supply chain on a large scale. We can imagine a successful voluntary program that cow-calf producers like yourself like. But we could also imagine a voluntary traceable traceability program that cattle producers, such as yourself do not like. So, if the beef industry adopted a traceable supply chain on a large scale that was viewed favorably by cow-calf producers. What would it look like?

Theme K Attributes of an Effective Large-Scale Traceability Program

**Interviewee eight** [00:09:17] Well, it would need to be streamlined, fairly simple. The information accessible throughout the chain so that, you know, I think you need to be a ???blue??? as as a producer. I need to see that year what the animals that are go to the feed yard and then processed into a program. What they're what the carcass quality is? How did they gain? Was their health issues? So that we can make immediate changes to our programs to affect any problems, to change any problems they're having. We don't get that information back soon enough to do any good.

**Interviewer two** [00:09:56] That makes sense. Who would be in charge of that program?

**Interviewee eight** [00:10:04] That's a good question. I don't know.

**Interviewer two** [00:10:09] Ok. If the beef industry adopted a traceable supply chain on a large scale that was not viewed favorably by cow-calf producers. What would it look like?

Theme I Cow-Calf Producers Concerns about a Traceability Program

**Interviewee eight** [00:10:21] Labor intensive. Job intensive. No information. No information fed back to the producer or no usable information. Those are all problem areas, I think.

**Interviewer two** [00:10:33] How how would you address, like, getting more usable information back?

**Interviewee eight** [00:10:40] I guess all I could do is talk to the as a small producer, I don't know that I could address it. I would just have to give my opinions to people like you that are gathering information that are involved in whatever organization was running the program.

**Interviewer two** [00:11:01] That makes sense. And then what information about you and your operation do you feel comfortable sharing with others in a beef traceability system?

Theme C Cow-Calf Producers Willingness to Share Information

**Interviewee eight** [00:11:14] I feel comfortable sharing all of it, I guess.

**Interviewer two** [00:11:17] Okay. Why why do you feel comfortable sharing all of it?

**Interviewee eight** [00:11:22] Because I'm doing, I'm producing a quality animal and following the health protocol that's top notch. I have nothing, no reason to hide anything that I'm doing from anyone. No matter what I produce how I do it.

**Interviewer two** [00:11:37] I don't blame you on that. If you if you're doing everything right, then you don't have anything to hide.

**Interviewee eight** [00:11:43] Exactly.

**Interviewer two** [00:11:44] And then do you believe a traceability system is necessary to manage disease outbreaks such as mad cow disease or foot and mouth disease?

Theme N Managing Food Disease Outbreaks

**Interviewee eight** [00:11:54] Probably, yes.

**Interviewer two** [00:11:56] OK. Why would you say why would you say that?

**Interviewee eight** [00:12:01] We need to know where the animals came from to determine where the problem started.

**Interviewer two** [00:12:10] OK, that makes sense. And are you concerned with the liability of if there was detected that a certain farm had the problem?

Theme J Insurance Policy

**Interviewee eight** [00:12:21] No.

**Interviewer two** [00:12:21] OK. And if the beef industry adopted a traceability system, do you think it should involve the USDA?

Theme M Role of the USDA

**Interviewee eight** [00:12:34] Probably would have to it be better if it did not.

**Interviewer two** [00:12:37] Why would you say it would be better if it did not?

**Interviewee eight** [00:12:42] They aren't user friendly. They're overworked, understaffed, your typical government organization.

**Interviewer two** [00:12:51] So you said I would probably have to involve the USDA. What role would the USDA play in that?

**Interviewee eight** [00:12:59] In beef traceability, enforcement, regulations, collecting data, publishing the data. I don't know who else you could get to do it.

**Interviewer two** [00:13:11] That's understandable. And if the beef industry adopted a traceable traceability system such that cattle producers felt compelled to participate in order to find buyers. Do you think that might alter the market power of cattle producers?

**Interviewee eight** [00:13:27] Say the question again, I'm sorry.

**Interviewer two** [00:13:28] Yeah, no problem. It's a long, long question. If the beef industry adopted a traceability system on a large scale such that cattle producers felt compelled to participate. Do you think that might alter the market power of cattle producers?

**Interviewee eight** [00:13:43] I think it would if it was a mandatory if everyone used it. Or that the ones that do use it are participating in it get a premium for doing so

**Interviewer two** [00:14:01] OK. How would it alter the market power?

**Interviewee eight** [00:14:06] It would allow the consumer to know where the animals came from.

**Interviewer two** [00:14:11] That makes sense. And do you have concerns that a traceability system might lead to the cattle industry becoming more like the swine or the broiler industry where it's more like contract farming.

**Interviewee eight** [00:14:30] No.

**Interviewer two** [00:14:30] And do you think consumers care if the beef industry adopts a traceability system?

Theme O Do Consumers Care About Traceability?

**Interviewee eight** [00:14:38] I think if they knew what it was, they probably would say they were in favor of it. Most of them probably don't even aren't aware that there is or isn't one.

**Interviewer two** [00:14:49] Okay. Do you think it's a good idea for consumers to be more aware of a traceability system?

**Interviewee eight** [00:14:55] Sure.

**Interviewer two** [00:14:56] Okay. How would you get them to learn more about traceability system? How would you educate them better?

**Interviewee eight** [00:15:05] It would have to be through advertising multiple advertising initiatives.

**Interviewer two** [00:15:10] Okay, that makes sense. So that completes all the questions we have prepared. Thank you again for participating. Do you have any comments you would like to add or suggest any questions we didn't ask that you think we should have?

**Interviewee eight** [00:15:26] No I don't think so. I think that's good.

**Interviewer two** [00:15:28] OK, well, one last thing before we let you go, we do want to get your mailing address so we can send you one hundred dollars in cash or you don't even have to write it off on your taxes or anything like that.

### **Interview of Interviewee Nine and Ten**

**Interviewer two** [00:03:00] Hey. This is interviewer two, the grad student at OSU studying ag econ. Is this still a good time to interview you?

**Interviewee ten** [00:03:10] It is, and I already have interviewee nine on the other line. You want me to merge him.

**Interviewer two** [00:03:21] Yeah that would be a great idea.

**Interviewee ten** [00:03:22] Now if I hang up on you, I will call you back.

**Interviewer two** [00:03:22] That's fine. I'm not the best with that kind of stuff either, so I understand.

**Interviewee ten** [00:03:28] Hang on let me see what I can do here.

**Interviewee nine** [00:03:39] Hello. Yes, I'm here.

**Interviewee ten** [00:03:43] Yes, I'm here. OK. Yes, it's awesome.

**Interviewer two** [00:03:48] OK, well, thank you guys for allowing us to allow us to do this interview. I'm writing my master's thesis on beef traceability, and I'm just interested in learning about your experience in the Integrity Beef Pilot project coordinated with Noble and through McDonald's and about traceability.

**Interviewee nine** [00:04:09] Cool. So, interviewer two, you're at Oklahoma State?

**Interviewer two** [00:04:11] Yes, sir.

**Interviewee nine** [00:04:14] Cool, again. Did you so did you get your bachelors from Oklahoma State or did you go to OU too?

**Interviewer two** [00:04:22] No, I'm actually something total totally different. I grew up in Alabama on a row crop farm, and I actually went to Auburn for undergrad. And then I came to OSU for graduate school. I had never even been to Oklahoma before I visited here in March. So, I'm totally not from Oklahoma.

**Interviewee nine** [00:04:45] I've been to Alabama. It seems like there was a lot more trees in Alabama than there are in Stillwater, Oklahoma.

**Interviewer two** [00:04:52] Yeah, there's there's definitely a lot more pine trees and there's a lot bigger trees, I think, because it rains a lot more in Alabama than in Oklahoma.

Do I need to delete this whole section or make edits to not personally identify them?

**Interviewee nine** [00:05:01] Dad and I both went to Oklahoma State. I was in mechanical engineering, and dad was in chemistry. But dad was at OSU a lot longer ago than I was, a lot longer ago.

**Interviewee ten** [00:05:16] Ok let's not talk age, not important.

**Interviewee nine** [00:05:16] We're we're we're very familiar with the OSU system. Dad dad supports the OSU system through the foundation and to the school of education. Don't you dad?

**Interviewee ten** [00:05:27] Yeah.

**Interviewee nine** [00:05:29] Gosh, I have not been to Stillwater. Dad when do you think the last time I was in Stillwater, five ten years ago? I can't remember. My wife just said probably five years ago. I don't think I'd recognize it now.

**Interviewer two** [00:05:43] Yeah. I can yeah, I've, I've definitely enjoyed Stillwater. I love OSU. That's a lot of people from Auburn that say they don't go to Auburn for a couple of years and then they don't recognize the campus at all.

**Interviewee nine** [00:05:55] I know there's a lot of a lot of the the owners have injected so much money into Stillwater that I'd need a map to get around that place now after having lived there for six years.

**Interviewer two** [00:06:08] Yeah. Yeah. I don't I don't I don't blame you on how they can. Campus has changed a lot in a short amount of time.

**Interviewee nine** [00:06:16] So if you if you grew up on row crops in Alabama, I guess somewhere along the way you get interested in beef cattle production or cattle in general. What's the explain to me, what's your what's your thesis? What's the topic of your thesis at OSU?

**Interviewer two** [00:06:35] It's it's basically beef traceability will will interviewing cow calf producers like yourself who participated.

**Interviewee nine** [00:06:43] Just cow calf, OK.

**Interviewer two** [00:06:45] Who participated in this project. And we're trying to gather their opinions so we can write a master's thesis on that.

**Interviewee nine** [00:06:54] Nice. Interesting. I know I never got my master's degree, dad did and my sister did. I tried reading my sister's thesis, but I fell asleep.

**Interviewee nine** [00:07:08] That's not a judgment on all theses, that's just a judgment on my sister's thesis. Course, she was a Ph.D. in psychology. So, I it it I think in me as a mechanical engineer. I don't know that I had any hope of understanding anything in her thesis. But I think I find yours a little more interesting, I think, just to see how it turned out.

**Interviewer two** [00:07:28] Yeah. Well, thank you for that. And we'll definitely even email you guys with a copy before we publish it and everything. And just like I said, we on the email, we are recording this email and a typed typed transcript will be prepared from the audio file and none of your personal information will be used and it will all remain confidential. Does that sound good or do you guys have any questions on that?

**Interviewee nine** [00:07:55] That's fine with me. Does that sound good to you dad?

**Interviewee ten** [00:07:57] It does, thank you.

**Interviewer two** [00:07:59] Awesome guys. Well, before I get started with the questions I just wanted to share with you our working definition of what we mean by a traceable beef supply chain and a traceable beef supply chain is one cattle and its beef can be traced from the farms on which the cattle are raised throughout the beef supply chain till the point of consumption. Why a single hamburger patty cannot be traced to the individual cattle from which it is made, we think that's a little bit too unrealistic. We do think it's possible it can be traced to a collection of farms. We are concentrating on a voluntary system, not a mandatory system. So, cow calf producers have the choice whether or not they want to participate in it. And in this system, information such as farm production practices, is passed down the supply chain from producers to meat packers to retailers, then information such as our caucus quality is passed up the supply chain from meat packers and retailers back to cattle producers. And this traceability system can operate through open markets, vertical integration, or something in between. Does that make sense or do you guys have any questions?

**Interviewee nine** [00:09:04] I don't. Dad?

**Interviewee ten** [00:09:05] No no, I don't.

**Interviewer two** [00:09:07] OK. Awesome. Well, we'll get started with the questions then. Well, the first couple questions about your experience in the Integrity Beef Sustainability Pilot project. And what did you like about the pilot project compared to the way you normally market your cattle?

**Interviewee nine** [00:09:23] Dad and I, well, full disclosure, I'm a board member with on Integrity Beef. So, you know, I'm an active board member. So, we and Dad and I have been members of Integrity Beef for, Dad what you think four years, maybe something like that. (Is that part ok as is?)

**Interviewee ten** [00:09:45] Sounds about right.

**Interviewee nine** [00:09:45] ???That's somewhat near or least worked by the ATF??? participating in Integrity Beef during that entire time. Your question, though, is the way that the way that Integrity Beef manages its requirement was not very different from what we would normally need to do to participate in the pilot project. A lot of a lot of what is required for traceability was all was also required for the for Integrity Beef, right?

**Interviewer two** [00:10:28] Yes.

**Interviewee nine** [00:10:30] Yes. So, the EID tags, all be it they were not USDA tags, they were just proprietary tags that we were utilizing anyway. But this was a pilot program. So, we didn't we didn't utilize official USDA tags. We were just using our old, like I said, proprietary numbers, a commercial system, basically. Beyond that, we it was just more paperwork. But in the grand scheme of things, it was not it wasn't really any more information that we needed to gather. And I think that we again, we had already, they they were preaching to the choir. We had already been sold. So, we already liked the aspects of a record that you we were keeping could be part of Integrity Beef. And we were just really just transferring that over to additional paperwork for the traceability project. And full disclosure, we never sold off the farm. Some of our cattle, maybe just a handful really were purchased through the pilot program, but they were purchased at the sale barn. We never had direct contact with any buyers directly. You know, direct sales or off the farm sales, private treaties directly into the pilot program. All of our cattle went through the through the sale barn. So, to ask what did we like about the project and how did that compare to what we were already doing? We were already doing that. And like I said, we were already on board. There was no we did have one opinion or another as to how we had to change our operation to participate in the pilot program.

**Interviewer two** [00:12:19] So you didn't see any difference really between the Integrity Beef Program and the pilot project?

**Interviewee nine** [00:12:26] No, not not not not to a point that it was noticeable or burdensome. Now, if we had been an average commercial cow-calf producer that was produced basically just stripping and selling, not keeping any records. They would if we were producers that had no affiliation with Integrity Beef, then yes, there would be a major difference. And the biggest difference is in record keeping, in my opinion. But since we were already doing that, it was it was easy. There was nothing there was no difference at least for us.

**Interviewer two** [00:13:04] Okay, that makes sense. So so, what was what do you think is the biggest advantage of being in Integrity Beef that you get a benefit out of?



**Interviewee nine** [00:13:14] For Integrity Beef?

**Interviewer two** [00:13:15] Yes.

Theme A Information Sharing

**Interviewee nine** [00:13:15] Well, it is gosh, I'm trying with what I need to do is compare our operation to how we did things, say, a decade ago. OK. The benefit is knowledge. OK. The and even though Integrity Beef and a traceability program does have requirements. Those were requirements that we were beginning to implement even starting a decade ago when we started first started working with Noble that were beneficial to our operations. So steering steering my response back to how does this apply to Integrity Beef and traceability, traceability and Integrity Beef requires record keeping. OK. That record keeping equates to knowledge to the producer. That knowledge can be translated into power. And when I say power, I mean power in decision making into utilizing the knowledge you've gleaned from the record keeping, whether that was record keeping that we were doing for traceability or record keeping that we were doing for Integrity Beef, it's up to the producer to use that knowledge and leverage it as power in decision making, which we did. And that's that's the greatest advantage to any of these programs, whether it's Integrity Beef or a commercial traceability or a mandated traceability or any other nonprofit organization. It's the power in the knowledge that is most beneficial to really our operation or any operation.

**Interviewer two** [00:15:10] That that that makes sense. And what did you not like about the pilot project?

Theme B Issues with the Information

**Interviewee nine** [00:15:17] Well, I think that I think that we have to be fair to this program and understanding that by definition, this was a pilot project. OK, there were there were wrinkles there there were there were there were things that we expected to the information that we expected to glean out of the process whenever we did, you know, submitted our records, went through the effort of keeping the records and submitting them. We we expected X, Y, and Z as an output. Now, again, I think we have to be fair to the program by sticking to its definition as a pilot project that this was really a what if what if we did this. What is the results of of keeping these kinds of records? What can what information can we give back to the producers? I believe that if you look at it in that definition, I would call it, you know, relatively successful. It it did produce the results that were expected. Were the results helpful? Yes and no. The biggest the biggest hurdle for any cattle production operation is the ability to change gears and to change direction quickly. Cattle production only has one crop per year. And if we submit records into the traceability program, it is six months later that we get the results back, if not longer. Because those calves ended up going to a feedlot and then we get, you know, the data from the carcass, especially like the carcass merits that has to be disseminated and put into the record and then filtered back to us. It is a slow process. And I think that's the greatest challenge with not only this this pilot program, but any pilot but any traceability program is that it cannot be expected for a producer to be able to react quickly. Right. And quickly enough to to remain an effective producer. So, I think that's the one biggest challenge or or or the one thing that we didn't really realize is information they got back to us that was useful for us to do anything with. Let me give you an example. We sell we sell a steer into the pilot program. It's an it is a year and a half later that that calf either a year or six months later or a year and a half after it's born, that the calf is slaughtered. We get its carcass merits back in or its mortality, morbidity back, results from the pilot program. That's great. I'm glad that I know how our it rated in its carcass merits. It's great that we understand mortality and morbidity after that calf leaves our farm. But for me to be able

to do something about that. That takes years. Right. And it it so it it is valuable information. But I think that it has to be I think it has to be taken sober knowing that, yes, we will do something with that information. But it's not going to be next week. I think that if it was one thing that we would like to, you know, that we would change, that we would like to have been different is to create records that you get back to the producers faster. And types of information, if we could do something about more quickly.

**Interviewer two** [00:19:33] Is there a way that you think that can be done?

**Interviewee nine** [00:19:39] Boy, I don't have an opinion on that matter. Dad and I were commercial producers, right. We hire consultants, smart people like you to tell us what we what is going to make us more effective, more efficient, more profitable. Dad?

**Interviewee ten** [00:20:03] I don't know.

Theme O Do Consumers Care About Traceability?

**Interviewee nine** [00:20:06] I mean, it it is and to be honest, again, we are reactionary. We try to be as proactive as possible in doing our own research into the industry to determine what do we need to be doing with our cattle. And to be quite honest with you, we only care about what the consumer cares about. The consumer is paying us to produce beef. Right? And our opinion is really steered in a slave to the opinion of the consumer. OK. So, if the consumer says that we need this, that, and the other we're on board, totally. So, to answer your question, is there anything what ideas do we have? Our ideas are really going to be based on what the consumer demand is or the regulatory demands to be able to keep the consumer safe and knowledgeable about where their beef is coming from.

**Interviewer two** [00:21:09] That makes sense. Do you think consumers care if the beef industry adopts a traceability system?

**Interviewee nine** [00:21:16] Oh boy, dad, you have an opinion on that cuz I know I do.

**Interviewee ten** [00:21:20] I think there's a selective market that does. It's a small niche market that I would perceive value in that. And if I understand it correctly, from a global economy perspective, we certainly have certain regions of the world that either A mandate it or prefer it, which from our perspective means that we need if we want to expand our market access, then it becomes a very important thing to meet that customer demand. I guess, how do you define the customer? Is it a government agency in Europe or China? Is that a value in the U.S. consumer? Some I believe a very small percentage see the value the rest in the U.S. I don't.

Theme O Do Consumers Care About Traceability?, Theme N Managing Food Disease Outbreaks, and Theme U Coronavirus Effects on a Traceability Program

**Interviewee nine** [00:22:09] That's a good that's a good point that I think about. Is defining what you mean by customer. Dad's right. Is is the customer that we're trying to appease a governmental agency, a regulatory agency or the end consumer? I agree with dad. It's the United States is they are they are fickle. They're fickle by ignorance, in my opinion. They they only care about what's immediately in front of them. Covid 19 is a perfect example. They didn't do that. I believe that the society did not know that they needed to be afraid of a pandemic until a pandemic was in front of them. Mad cow disease in Europe is a great example of that. Traceability in Europe didn't take off until there was a need for it. So, I realized the traceability programs and these conversations that we're having, are in place to try and avoid mass outbreaks like this. I view it with with the with the U.S. economy being mostly middle class or at

least we hope that it is, I think that if you you just have to you have to market toward the average of society. Does the average household of two of four and a half members that buys ground beef from Wal-Mart care? I I doubt it. I think that, like Dad said, there are niche markets in that people that buy organic that there will be, ???but??? people that buy into traceability. But ultimately, the greatest pressure will be from the masses in response to something that they didn't know about to begin with. And unfortunately, like we're seeing now, that may be a pandemic.

**Interviewer two** [00:24:12] That that makes sense. And that's a really good answer and good clarification to differentiate between the different types of consumers. Some will care about traceability and some will not care. How how did you feel about sharing information about your operation and cattle with others in the pilot program?

Theme B Issues with the Information and Theme C Cow-Calf Producers Willingness to Share Information

**Interviewee nine** [00:24:32] That's a pretty hot topic amongst Integrity Beef. I so I won't speak for everybody. I think that we'll just reserve our answers to our opinions and I'll give mine. Let's see how Dad responds. I do I do not mind giving records and data in so far as two requirements are met. One, it's anonymous. And two, that there are that the financial aspects of the records that we're submitting are limited. And so, it's to the point that we can only compare, we can we can only make comparisons between our operations and other operations. But that information is is at least backed up by knowledge of what the other operations are that we're comparing ourselves to. Dad and I have 135 cows. I see some sales records of another operation. How does that compare to ours? And Dad and I have had that had this conversation where, you know, we want to understand we're more concerned about understanding the performance of our cows. But we we do find value in understanding. Part of that performance is sale price, for example, price per pound. So, and I believe that the other members of Integrity Beef ours has similar opinions in one way or the other, that that those two limitations are put up that are there, that they're anonymous, and that there are limitations, especially on the financial side. We don't want to just open up our accounting ledger for free rein to be insinuated and criticized. Right. It needs to be based on performance and with the motivation. And it's in this argument it's being used for traceability. And what purpose does financial records have in a traceability arc in traceability conversation probably doesn't.

**Interviewer two** [00:26:55] That that's totally understandable. And I understand that. What information passed up the supply chain to you did you find useful?

**Interviewee nine** [00:27:07] Oh man I'm trying to think what we got trying to think what we got back. Actually, I can can you rephrase that question? Make sure that I understand what you're asking.

**Interviewer two** [00:27:18] Yeah, no problem. We're basically saying, like, what information passed up the supply chain that you got back from like feedlots and meat packers did you find useful to your operation?

Theme A Information Sharing

**Interviewee nine** [00:27:31] That would be the three that stand out to me that we got back was carcass merits, like marbling, yield, grade. And the other two were morbidity and mortality, basically health metrics that we got back. They're all useful in my opinion. But I go back to my previous response. Yeah go-ahead Dad.

**Interviewee ten** [00:28:07] I just want to ask and I don't remember tied to the thing that you just said we got from packers. Did we get a sale comparison price per pound comparison?

Theme BB McDonald's Project and Integrity Beef

**Interviewee nine** [00:28:21] Not through the pilot program, but Jason he well all the results are after the calves been slaughtered. All these records that we get back from the pilot program is afterwards. Well, that's not entirely true mortality and morbidity is in sitchu. It's in the middle of the process. If they have to pull a calf because it got sick, they reported back to us the number of our calves that were purchased and put into the pilot program, how often they had to be pulled out of the feedlot and given an injection of for foot rot or respiratory disease or if it died, I don't think we ever had any die. But then after it was slaughtered, they they gave us its carcass merits. As far as the only the only sales performance that we got in in comparison to other folks was by through an employee of Noble. But it was not, I may be wrong about this, I don't remember it comparing just cattle within the pilot program. It was all cattle in the Integrity Beef program that sold in El Reno so that that data would probably be skewed. If we got that information, I didn't pay attention enough to understand it.

**Interviewer two** [00:29:51] OK. Well, what what information to you did you not find useful?

Theme B Issues with the Information

**Interviewee ten** [00:30:03] If I recall, there were questions and again I get over my head here pretty quickly, it was kind of a causality issue of ok a morbidity mortality rates. It was be able to determine what might have been the reasons for whatever outcome that might have been seemed to be fairly skeptical for us. And maybe that information never was intended to be a part of their report with that type of information, I think will help us make far better decisions going forward. And the plan may be for them to accumulate data, data on cause, or a longer period of time if we had continued the program.

**Interviewee nine** [00:30:47] And dad's right. It is the limitations of the program as being a pilot. It was not deep enough and it wasn't wide enough to really provide back enough information to understand, is this a single farm issue or is this a systemic issue. So, to answer your question, what did we receive back that wasn't useful? I don't know that we got anything that wasn't useful. I think that wasn't or what it's what we didn't get back or it is really just the limitations of the program in general that that we didn't find very, you know, very useful. If the pilot program had gone on, it had gotten deeper, it's gotten wider. More information would have diluted a lot of the a lot of the percentages that were given back to the producers simply because of the sampling, the larger sample.

**Interviewer two** [00:31:48] That that makes all the sense. Small samples are often biased.

**Interviewee nine** [00:31:53] Oh yeah, it's a cliché at this point. Yeah.

**Interviewer two** [00:31:57] Well, what what steps were taken to make you feel comfortable sharing information about your operation?

Theme D Steps Taken to Make Cow-Calf Producers Comfortable Sharing Information

**Interviewee nine** [00:32:04] An open conversation about what what what the group deemed appropriate and acceptable. It was it was discussed openly with the the entire membership of Integrity Beef, and that those conversations happened regularly simply because as as Integrity Beef as a program, we have those conversations. What records are appropriate? What records are

is everyone comfortable sharing? What what records with data that we're collecting is powerful? OK, so that all of that was discussed in the open and it was you know, it was agreed that that agreed upon by by a consensus of what would be what would be used. And how do we do that?

**Interviewer two** [00:33:07] That that makes sense. And it's a pilot project was made permanent, let's say, over the next five to 10 years. Would you continue to participate in it?

**Interviewee nine** [00:33:17] Dad would you continue to take part in the pilot program or any kind of traceability program?

Theme E Will Cow-Calf Producers Continue to Participate in the Integrity Beef Sustainability Pilot Project?

**Interviewee ten** [00:33:22] Yes.

**Interviewee nine** [00:33:24] I would. You know, it it's all it's all about value or is it's the it's the basic, again, cliché argument of effort versus value. And in itself in so far as we find value in it. Yeah.

Theme B Issues with the Information

**Interviewee ten** [00:33:45] Well, in ???the tabbouleh??? question of the demise of the program is one that we could debate, I'm sure. But I think we all know that we in order to compete in a commodity market, we have to differentiate and by doing things that give us a competitive advantage with traceability or whether it become product branding, whatever that might be. I think interviewee nine and I support those very strongly. And we know that by sharing data with our members, as interviewee nine said, outlined that if ???Sterling??? we see from every producer, there is always an issue of we supply specific data. But another of our members only supply part of it. Then we have dirty data. If we I think with consistency and time, we would have had a pretty powerful program.

**Interviewer two** [00:34:43] How do you think you address that issue of dirty, bad data as you say? How how the data can be entered in correctly and accurately?

**Interviewee ten** [00:34:51] You have to have an oversight person willing to say. To call me and say interviewee ten you you supply the information, you put it in the wrong format, or you miss these three categories, and you need to send it in. I would have had to have previously agreed to shared it all so that I could be held accountable for what I either sent in or I didn't send in. But obviously, Integrity Beef has limited manpower. Noble has limited commitment to be able to supply manpower. And so, I don't think we challenge our us members on the quality of data that we send in. And that left us with comparisons between producers that weren't always very reliable.

**Interviewee nine** [00:35:46] And the limitation in the data set, the small quantity of data set, is I believe the has the greatest effect on being able to it being able to agree that the information that was given back to us is representative. It has to be deeper. It has to be wider. It means a much larger data set over a much longer period of time.

**Interviewer two** [00:36:12] OK. And then you said there would be an oversight committee. Who do you think would be in charge of that oversight committee? Would it be someone from Noble?

**Interviewee nine** [00:36:23] IMI comes to mind. They are they are a bona fide third-party data analyst. That is viewed and we were talking about utilizing someone like that. Now in going

going forward, so that they are an uninvolved third party that has that is outside the politics. That can simply, one, understand what the rules are, what data needs to be collected, how it needs to be stated and then break down and then police that. It's that that's that's the best way to do it just use of a third party.

**Interviewer two** [00:37:12] That that that makes sense. And do you believe the cattle industry will begin adopting traceability beef supply chains on a large-scale level?

**Interviewee nine** [00:37:24] Dad do you believe the hope of traceability just kicking off any time soon as a nation?

Theme G Are Cow-Calf Producers Open to a Large-Scale Traceability Program?

**Interviewee ten** [00:37:31] Well, I think what's interesting is I was on a OSU webinar yesterday and dealing with a co-op. And I think there is such a hunger for cattle producers to be able to become more competitively, more competitive, that there is a willingness to do what we need to do as an industry to kind of shake off some of our independence as cattle producers, where we have been a very independent lot to try to get closer to the crop business into creating coop, creating information that helps us distinguish our product. I think there's a growing trend toward it, whether that becomes something that is standard in the industry. I have no idea. But it's something that I think we all real, most of us realize is just has to happen.

**Interviewer two** [00:38:30] That that's understandable. Why why do you say it has has to happen?

Theme G Are Cow-Calf Producers Open to a Large-Scale Traceability Program?, Theme H Voluntary or Mandatory Traceability Program, and Theme W Cattle Industry not a Profitable Business

**Interviewee ten** [00:38:37] Well, I don't know that in the U.S. it will become such a demand. But I believe it's because of beef consumption. The U.S. is flat to falling. Our markets are going to be outside of the U.S. and for us to see a growing industry year over year. What I see for the foreseeable future, our products have to be as aggressively positioned in Asia as well as in Europe for us to be able to have price supports, to be able to grow our business. And if the U.S. doesn't adopt traceability law as a requirement then, which I don't think will happen at least in its current administration, then we it's always going to be something that can be secondary in whether we do it or not. But I just see our market opportunity outside of the U.S. That's where the growth is. That's where it will continue to be. And I'd like to play by their rules.

**Interviewer two** [00:39:38] That that make sense. One of the things as I was doing research, I did see that the U.S. was losing out on a lot of export export opportunities in the beef industry because of a lack of a traceability system.

Theme R Traceability in Other Countries

**Interviewee nine** [00:39:53] Yeah absolutely.

**Interviewer two** [00:39:54] So now I want you to shift gears a little bit that suppose the beef industry does adopt a traceable beef supply chain on a large-scale level. We could imagine a successful voluntary program that cow-calf producers like yourself would find favorable. We can also imagine a large-scale traceable beef supply chain that cow-calf producers like yourself do not find favorable. So, if the beef industry did adopt a traceable supply chain on a large scale that was viewed favorably by cow-calf producers, what would it look like?

**Interviewee ten** [00:40:27] I'll let you answer that one interviewee nine.

**Interviewee nine** [00:40:33] I, I argue in my mind how to answer this. And I think to be fair to your process, I'll answer it only of my own opinion. And not what I believe is the opinion of other of other beef producers.

**Interviewer two** [00:40:50] That's what we're asking is for only for your opinion.

Theme K Attributes of an Effective Large-Scale Traceability Program and Theme I Cow-Calf Producers Concerns about a Traceability Program

**Interviewee nine** [00:40:53] Yeah, I don't I don't want to try and educate someone smarter than me on what the opinion of everyone else is so. A traceability program that would be powerful to us and we would agree with and we would whole heart wholly support is exactly what Dad said, a system a traceability program that opens up the world to our beef. OK. Now one the complete opposite of that in some regards is a program that opens up our our beef to a world market. However, that is so burdensome and so risky as a producer that we second guess even being in the beef industry. And ultimately it the risk is if the requirements of a traceability program are so burdensome that the only avenue that beef can be produced is at an industrial level, that we would not support that. And here's what I mean by that. If if the traceability program requirements are so widespread and burdensome that we have to have OSHA inspections that we have to have that we have to have effectively have industrial insurance, that that the consequences of a violation are so great that effectively the beef industry turns into the chicken industry or the pork industry, where it can only be financially feasibly produced at industrial level. That will put that will shift us small producers out of the industry simply because we would not have the manpower, we would not have the financial assets. We could not we would not have the risk management of a violation in this program. If we you know, we we follow all the rules of the traceability program. We if, God forbid, something terrible happens. One of my cows gets mad cow disease. I infect a whole bunch of other cows. Next thing I know, I'm looking at prison time. Ok. That the only the only entity in the United States that could handle that kind of risk management is an industrial at an industrial level. But if it's a traceability program that opens us up to the world market. Right. Is valuable to us that we could see the value but the restrictions, the requirements and the restrictions are reasonable. They are they are to quote the Declaration of Independence; they are self-evident. Then we would totally support that. You know it because we can see fine. We have to work a little harder with our record keeping with our with our ranch management tactics, with our risk management. But the benefit is far greater than than the effort that is required. I think those are those are the two programs, one that we would like and would support and one that we would wholeheartedly not support. One that is catered to American farms and ranches that are family owned that are small to medium to average size, that that the whole ranching industry to get behind more reasonably without taking on a risk or a worry of negative consequences of, you know, some kind of violation. That's not to say that that the whole beef industry, in my opinion, doesn't need to shift toward traceability. I'm on board with traceability because I think it creates a far higher quality product, but not yet so far that it starts to create fear within the ranchers that the FBI is going to come knocking on my door. If I if I don't use BQA injection sites on the neck, and I get a I get a lesion in the meat, something like that. It would have to mitigate that fear.

**Interviewer two** [00:45:28] Yeah. I don't blame you on that. And you actually answered our next question about what would it what would you not like. We had a question later on. You mentioned like how the swine and broiler industry were basically like industry farming, contract farming. Do you think the cattle industry will go that way?

Theme Q Risk of the Cattle Industry Turning into the Swine and Broiler Industry

**Interviewee nine** [00:45:46] Well, I hope not. Considering your consider your audience, I Dad and I hope that doesn't happen, you know.

**Interviewee ten** [00:45:56] Well, I in my opinion, there is and I don't believe it. It has or is following the poultry side of things because large corporations have already bought producing operations where they have not had not licensed it out or franchised it out to smaller producers. They've actually controlled from farm through processing, which I think was a little different than the chicken industry, if I remember correctly. ???And number two,??? I think there is a strong stand about for ranchers today building their own just like Integrity Beef. Where we joined together so that we can prevent that from happening. And one of the things that was interesting yesterday's call that might happen is that if a group of a hundred ranchers formed together to create a co-op, we become so successful in that co-op that our business is sold to a private company that might happen. But I think that's years away.

**Interviewee nine** [00:47:07] And and I think I wasn't on the WebEx yesterday that dad was on. But one thing that I did hear about it, and I believe Dad what was the name of the doctor that was leading it yesterday?

**Interviewee ten** [00:47:20] Hempley.

**Interviewee nine** [00:47:23] Is that right? I thought it started it with a K. Whatever.

**Interviewee ten** [00:47:23] Maybe it was Kempley I can't remember.

Theme G Are Cow-Calf Producers Open to a Large-Scale Traceability Program? and Theme Q Risk of the Cattle Industry Turning into the Swine and Broiler Industry

**Interviewee nine** [00:47:32] I don't know anyway effectively you know, cattle ranchers in comparison to row crop farmers are prima donnas. We want to do it our way. We want to remain independent for whatever reason. Dad and I are probably in that category. I don't I don't want to go work for a big industrial conglomerate. You know, we we we want to produce cattle because we we like living out on our cattle ranches. We don't we want to we want to be a part of an employee owned business. And, you know, that's about the extent that I would be comfortable like these co-ops where I own into a business. And and we, you know, we still retain the assets of our of our ranch. I I don't I don't think it's going to go toward the industrial model, like chicken and pork has, not in my lifetime. I say that and I'm going to turn around tomorrow and Tyson's going to start buying up cattle ranches. Knock on wood.

**Interviewer two** [00:48:42] Yeah, but I can I can I can see that's. You think it's possible to have a traceability system without there being going the way of the swine and broiler industry.

Theme Y Importance of Compromising

**Interviewee nine** [00:48:53] Oh, sure. Sure, absolutely. Just like, you know, like I mentioned it, I know a little bit about the model that's used in Europe. I don't have a real good grasp on the size of cattle production outside the U.S. Dad might. But, yeah, there's there's certainly that is certainly possible. Anything's possible. And so, for as long as we all get on the same page, we talk to each other, we figure it out, listen. We want to keep ranching as family businesses, but we want to extend out into a world market. How can we do that? The only way that's gonna happen is through conversation and mutual agreement.

**Interviewer two** [00:49:35] That that's that's a really good philosophy. Communication always seems to ease the situation and make things a little bit better between everybody.



**Interviewee nine** [00:49:43] You have to be you have to be you gotta be mature as a business man. If you're going to succeed, as in in any industry, cattle ranching is no different. You have to be mature enough to know that if you want to grow your business, you have to there's compromise. There is give and take. You have to open up those lines of communication. I'll give you something if you give me something. OK. Not like any other business in the United States, from making t-shirts to making straw hats, cattle ranching the same way. We we just have to communicate. We have to compromise. We have to determine where is what's happening in the world market. How do we do that and what will we give and what will we take in exchange for being able to do that, but still holding onto our core, our our core philosophy of what we believe. We want our cattle ranch to be.

**Interviewer two** [00:50:39] That that that makes sense. And now what information about you and your operation do you feel comfortable sharing with others in a beef traceability system?

#### Theme C Cow-Calf Producers Willingness to Share Information

**Interviewee nine**[00:50:51] Oh again, I go back to the response I gave earlier that financially I think that that those records need to be limited in so far as they can, that we're that we're comparing financial information. I think that that really only gets down to, financially it only gets down to two things the size of the calf and the price per pound. That's about all I would ever really be comfortable with. And I don't know if dad would even be comfortable sharing with the world what we got price per pound. But it also goes back to the absolute the absolute requirement that it's anonymous. It's got to be anonymous. I don't want the world to know that my cows got twenty five percent less per price per pound than my neighbor did. That carcass stuff, I don't really care about all that that's all manageable usually.

**Interviewer two** [00:51:54] That that's understandable. And do you believe a traceability system is necessary to manage disease outbreaks, like you mentioned a little bit mad cow disease or foot and mouth disease?

#### Theme N Managing Food Disease Outbreaks

**Interviewee nine** [00:52:05] Sure. I think the first thing my opinions are a product of my surroundings. Right. I see what I see the program that's required in Japan and in Europe. I mean, I'm I'm not going to argue with whether they're necessary or not or what whether their necessary. I just formulated the opinion of my mind that they are effective, that they do the job that they were intended to do. Otherwise, this is all this effort is futile work. We're just we're just spinning our gears for fun. So, yeah, I think it would. Traceability can help mitigate the spread of disease.

**Interviewer two** [00:52:51] That makes sense. And if the beef industry did adopt a large-scale traceability system, do you think it should involve the USDA? And if so, how?

#### Theme M Role of the USDA

**Interviewee nine** [00:53:05] Oh boy. Now you're getting into the socioeconomics I don't know. Do you vote Democrat or do you vote Republican? I don't know. Do you force it on the on the industry or does the industry adopt itself as the way I see that question going?

**Interviewee ten**[00:53:21] You know, I guess from my perspective if you're going to truly have a traceability program in the United States that puts us on a at least a level playing field with our competitors. Argentina, Australia, and Europe then yes government administrative government input and somewhat control of that data this has to happen. I think we as ranchers have got to decide, are we going to continue to play in this independent, do it our way and confine ourselves

to a declining market? Are we going to be willing to take a risk and share data, share protocols in a blinded way in order for us to be able market our product elsewhere? I think has to happen. So, I support that. Obviously, there's always the issue of how it's done, but overall, I think it makes sense.

**Interviewer two** [00:54:32] Do you think most ranchers would be willing to share that information? If they learn they can hit it big in the international market and take that risk or do you think most ranchers will be too independent to see that change?

Theme H Voluntary or Mandatory Traceability Program

**Interviewee ten** [00:54:49] I I'd lean that ranchers are too independent to make that change. However, I think there is a growing number of if you look at the demographic of ranch owners, they are typically second job opportunities where a person has a primary job and then has a ranch where they can make marginal profits. But have enough insight into what it's going to take to make greater profit, I think that growing group of farming base will adopt sharing data, through a traceability plan. And I also believe corporate farms see the advantage because they look at a longer-term financial perspective. They'll be willing to do it. And in all candor, if my product can be labeled traceable my product meets certain criteria and the other half of the ranchers in the United States don't do it. I have a competitive advantage over those independent folks. So, for me, selfishly, I'd be that would be great.

**Interviewer two** [00:56:01] And that that makes sense. And who do you think should determine the criteria for a traceable product?

Theme M Role of the USDA

**Interviewee ten**[00:56:09] I think the USDA has to be working in a collaborative way with producers, has to be the organization that establishes that criteria or we won't have merit in other countries where government agencies do it there.

**Interviewee nine** [00:56:26] Yeah and back to what Dad responded to a minute ago. It'll ultimately have to be the USDA that's having conversations with Europe and Japan and Australia and Argentina. What do we what can we all agree upon that needs to be included in this traceability program so that we can open up international markets to eat less produced beef?

**Interviewer two** [00:56:53] That makes sense, and that completes all the questions we have had. Thank thank you so much for participating. Do you have any comments you would like to add or suggest any questions we didn't ask that you think we should have?

**Interviewee ten** [00:57:09] I don't really have any additional comment. First of all, thank you for including us number one. Number two, you did say that before you're published, we will have the opportunity to read part, after it's published, we'll have an opportunity to read your findings.

**Interviewer two** [00:57:26] Yes. After publication, you will have the chance to read our findings.

**Interviewee nine** [00:57:31] Awesome. Thank you.

**Interviewee ten** [00:57:32] No, I don't have anything. Thank you.

**Interviewer two** OK. And just one last thing. We we we need to get your mailing address so we can both send you guys one hundred dollars for participating and it will be in cash, so you don't even have to write it off on your taxes or anything.

## **Interview of Interviewee Eleven**

**Interviewee eleven** [00:00:55] Hello.

**Interviewer one** [00:00:56] Interviewee eleven.

**Interviewee eleven** [00:00:57] Yes.

**Interviewer one** [00:00:58] This is interviewer one, professor at Oklahoma State and interviewer two, the graduate assistant who talked to you recently.

**Interviewee eleven** [00:01:04] Yes.

**Interviewer one** [00:01:05] This is right now still a good time?

**Interviewee eleven** [00:01:07] Sure.

**Interviewer one** [00:01:08] Okay, great.

**Interviewer one** [00:01:09] Hold on one second.

**Interviewer one** [00:01:15] All right, well, well thanks so much for willing to grant us an interview. You know, just so just a reminder of a couple things we are after we're done. We're going to get your address and we'll send you \$100 a cash and appreciation for you given us this interview.

**Interviewee eleven** [00:01:33] Sounds good.

**Interviewer one** [00:01:33] Alright. And and what we're going to do is we're going to we're going to be recording this interview. So, we're not even writing anything down. But, you know, know that when we go to publish something, we're never going to say your name. We're never gonna associate you with a quote or anything like that. And we're even going to give you a chance to look at the transcripts and they're going to be converted into a written transcript will even give you a chance to look at those. Well, again, thanks for being able to do this. Let me just kind of start by describing exactly what we want to interview about, where we're interested in interviewing people like you who will part of that traceability pilot project done with the Noble Research Institute.

**Interviewee eleven** [00:02:22] Yes, sir.

**Interviewer one** [00:02:23] And I'll tell you, it's taken me years not to call them the Noble Foundation.

**Interviewee eleven** [00:02:28] Me too I'm the same way.

**Interviewer one** [00:02:30] And what were you know, and that program had a lot of things with it. Things like traceability, things like sustainability. We're mainly concerned about traceability here. And we're going to tell you in a minute exactly what we mean by traceability. But you're welcome to bring up other things as well. And these are all going to be kind of open-ended questions where you can answer your own words, however long or short of an answer you want. And so just just to give you an idea of what we mean by traceable beef supply, because I know the people can use the same term to mean different things. But when we say a traceable beef supply. Well, first off, we are talking about a voluntary system. So, this isn't a system that would be mandated by government. It would be something like the Noble Institute doing with you where

you voluntarily agreed to be in. Traceable for us means that you can trace beef from the farms to the point of consumption pretty well. You know, we're not saying that for every hamburger patty, you can figure out exactly what farms the meat came from. We're just saying, you know, if you have a beef patty and want to know where it came from, you can get some kind of decent information about it. And but we're also when we say traceability system, we also talk about a system where information from producers like you was passed down the supply chain to meat packers and retailers. You know, information on like immunizations, how the cattle were raised things like that. And information is also passed up the supply chain to you from meat packers and retailers, things like the carcass quality. And and when we're saying a traceable system, it could mean a system that works through open markets. It could go through vertical integration or something in between. When we say traceable, we don't we don't want people to automatically think there's market power issues involved. Even though there may be and we are going to ask you about that.

**Interviewee eleven** [00:04:37] OK.

**Interviewer one** [00:04:39] Does that kinda make sense?

**Interviewee eleven** [00:04:40] Sure.

**Interviewer one** [00:04:40] Okay well great. Well, what I'm going to do is I'm gonna hand it over to interviewer two in a second. Keep in mind I've researched cattle production and cattle marketing, awhile. Interviewer two here is familiar a little bit but we don't know as much as you do. And we may end up asking some dumb questions so just be patient with us.

**Interviewee eleven** [00:05:00] That's ok.

**Interviewer one** [00:05:00] All right. Well, I'm gonna I'm going to hand it over to interviewer two now but I'll be here if there are any questions come up along the way.

**Interviewee eleven** [00:05:07] Okay.

**Interviewer two** [00:05:08] Yeah. So, I grew up on a row crop farm in Alabama. So, I know a little bit more about row crops. So, I'm not a cattle expert, so I might say something stupid as well.

**Interviewee eleven** [00:05:17] That's OK.

**Interviewer two** [00:05:18] But the first few questions are about your experience in the Integrity Beef Sustainability Pilot project you participated in with Noble Research Institute. And the first question is what did you like about the pilot project compared to the way you normally market your cattle?

Theme A Information Sharing

**Interviewee eleven** [00:05:35] Well, as is already been stated. We I wanted to know and we have fed cattle in the past. So, I now, pretty much how our cattle are going to keep. You know, you never know from genetics genetics change and that was my biggest issue, other than the fact that there was a premium in it. I wanted to I wanted to know if we were still on the right track policy wise, great yield, yield grade wise. And that what probably enticed me as much as anything.

**Interviewer two** [00:06:09] OK. That make sense and what did you not like about the project?

Theme B Issues with the Information

**Interviewee eleven** [00:06:14] Oh, I don't know. This may not even be the answer you want, but there were kind of some issues in the way that the cattle were marketed. I think that that may be that the people on the buying end knew that there was going to be a premium, especially that first year, and they probably discounted the cattle just a little bit. I don't think it was anything major, but but. And I may be I may be way out of line here and I'm not trying to be a conspiracy theorist. But I do think that there probably was a little bit of a marketing issue, and I'm nit picking here so don't think I'm being extremely critical. Because I was very pleased with the program. But if there was one thing that I didn't like about at least the first year that was it. Second year I think it was much better.

**Interviewer two** [00:07:08] OK. That makes sense. You said it did improve the second year right. Why did you think you saw that improvement from the second year?

**Interviewee eleven** [00:07:16] Well, the first year the guy came and looked at the cattle. And I think he probably bid them and I don't again I'm speaking a little bit off the cusp here because I don't have a whole lot of facts backing this up. But I think I don't remember numbers, but I think the cattle would have brought, you know, maybe a nickel more at the sale barn. And I understand that somebody is buying them in the country. They can discount them a little based on transportation, commission, yardage, things like that, shrink that we can manage down in the country. And I notice that there is always a little bit of a discount there. I think there's even a little bit more on top of that first year, but for the second year we didn't even bicker he made an offer and I said we're good to go with that.

**Interviewer two** [00:08:07] Well, that's that's good that it improved the second second year. The next question is all about information sharing. How did you feel about sharing information about your operation and cattle with others in the pilot program?

Theme C Cow-Calf Producers Willingness to Share Information and Theme A Information Sharing

**Interviewee eleven** [00:08:19] I have no objection to sharing information. We're not I'm not going to hide anything. In fact, we're just an open book here. We're not going to do anything wrong. And that's one of the reasons that I like something like this. I mean, we're not going to do anything wrong on purpose. But that's one of the reasons I like things like this project. I feel like I have an opportunity to get a return on some of the things that we do like the Integrity Beef price alliance at Noble Foundation. We haven't participated in it the last few years because of when we market our cattle know we do follow their guidelines in the pilot project. But those all those guidelines are excellent. I want people to know I want the consumer to know that I'm doing it right. I'm not filling these cattle with antibiotics for no reason. Matter of fact, we use as little as we can get by with. And I want people to know that.

**Interviewer two** [00:09:18] That makes all the sense in the world. And what information passed up the supply chain to you did you find useful?

Theme A Information Sharing

**Interviewee eleven**[00:09:26] Oh, nothing really earth shattering because again, we fed cattle in the past for the express reasons to know what if we're doing what what the industry wants and what consumers want and what's good for us. And I don't know that there was anything major that we learned. That I take that back. There was one for the first year. We did have a set of cattle that they had to do a few extra pulls in the feedlot that I was a little bit concerned about. And because of that, we changed vaccinolus. You know, we just tweaked our vaccination programs

just a little bit, not a lot. And I'm not sure if that was it or the conditions. I've talked to a couple of people that were in charge of the program. And they seem to think that that a lot of people had the same issues. So, when I say that we tweaked it and we weren't like we went away from a vaccine or did something totally different, we just a little bit of timing. I thought we might not get the vaccine. Excuse me, in those cases a little bit earlier than we did that. And I hope that was what made the difference. So maybe it wasn't. But there were there were some estimation that came up the chain that that that caused us to do some thinking towards that.

**Interviewer two** [00:10:51] Well, that that's that's good. And I think that's kind of the purpose of information sharing to get you to change a little bit, hopefully for the better. What information did you not find useful?

**Interviewee eleven** [00:11:05] Oh, I don't know if there was anything that wasn't some use. I mean, if you just wanted me to go up, what was the most useful to what was the least useful and discard the least useful. I don't know that you would want to discard it because even what was was not that I didn't put that much weight on it. It still had some weight.

**Interviewer two** [00:11:29] That makes sense and some of these questions might be a little bit repetitive. You might have already answered this, but if you can think of something else, that would be great. What steps were taken to make you feel comfortable sharing information about your sharing information about your operation or were you just already comfortable because you wanted to share the information?

#### Theme C Cow-Calf Producers Willingness to Share Information

**Interviewee eleven** [00:11:48] I was already comfortable. Again, I welcome visitors to come out here. We aren't trying to hide anything. It's not like we're out here doing something in secret. It wouldn't bother me for somebody to show up here any day, working calves or now I may get frustrated once in a while working cattle but if they don't do what I want them to, it's not like we're out here beating them. So, we're going to do what's right hopefully a hundred percent of the time. We aren't trying to hide anything.

**Interviewer two** [00:12:19] And that seems like a good way to conduct your business. In a what aspects of the pilot program, if any would you recommend changing?

#### Theme B Issues with the Information and Theme F Issues with the Integrity Beef Sustainability Pilot Project

**Interviewee eleven** [00:12:29] I will have to think about that for a minute. You know, maybe, maybe get some and I don't know. I don't really know how they would go about it, but I would like to know if the consumer at the very end of the chain what they think about it, if they think hey these hamburgers taste better or I would like to get a little bit of their end to it. I like it. But I would feel like if I get their perspective.

**Interviewer two** [00:13:02] That that makes sense. I'll go ahead and skip because we had a question later about consumers. Do you think consumers care if the beef industry adopts a traceability system?

#### Theme K Attributes of an Effective Large-Scale Traceability Program and Theme O Do Consumers Care About Traceability?

**Interviewee eleven** [00:13:11] I do. I go I go to church with a couple or did go to church, but they've since moved off. They have taken jobs at other places. There were a couple of couples

that I used to go to church with. They used to ask me and they were not from the country. They used to ask me often about beef because they would come to my house and eat for whatever reason and they just were overwhelmed at how good the beef was. And they got it over the course of time they got to where they would buy a little bit of hamburger meat here and there. And I think it was a comfort to them knowing that it did come from not a and again, I don't want I'm using these terms a little flippantly and I don't mean anything derogatory by it. It wasn't factory farmed. It came from a place where you can go out there and see the cows walking out there grazing, standing in the shade, or whatever, and they weren't stressed. They were they were in the environment that God meant to put them in. You know to a certain extent. I mean, I don't know if God intended for them to run free or not. I don't know always know about God. But but anyway, it was a comfort for them to go out and see they weren't unusually stressed.

**Interviewer two** [00:14:24] Yeah, that makes sense. Do you think that's a major issue that consumers are maybe a little bit hesitant to buy beef sometimes that maybe if they actually saw the cattle, they would actually feel more comfortable buying buying more beef products?

Theme K Attributes of an Effective Large-Scale Traceability Program

**Interviewee eleven** [00:14:38] I think to a certain extent, yes. On the other end of that, they they don't want to get too close to them about that. You know, they start naming them, then it's hard to harvest them.

**Interviewer two** [00:14:47] Yeah, absolutely. It's a kind of a double-edged sword there. Well going back to the pilot project. If the pilot project were made permanent over the next five, 10 years, would you continue to participate in it?

Theme E Will Cow-Calf Producers Continue to Participate in the Integrity Beef Sustainability Pilot Project?

**Interviewee eleven** [00:15:02] Certainly.

**Interviewer two** [00:15:03] That's that's that's good to hear. And do you believe the cattle industry will begin adopting a traceable beef supply chains on a large-scale level?

**Interviewee eleven** [00:15:13] I think we should point that direction. I don't know about all the logistics, but I do think that it would it would be beneficial maybe to at least point that direction.

**Interviewer two** [00:15:26] OK. What what direction? What kind of things would that mean to you, like you said, go in that direction, what does that entail for you?

Theme K Attributes of an Effective Large-Scale Traceability Program

**Interviewee eleven** [00:15:34] Well, and again, I don't know that, you know, they're going to have a name and a phone number on package of beef. But I do think that, you know as best we could it would be it would be nice to put it you know, I'm going to make an analogy here. It's like talking to you on the phone. I have no idea what you look like. I could recognize your voice. But if I could put a face with a name, it makes it I don't know I don't even know what the word I'm looking for is. It's kinda that way. And again, I'm not saying it's going to be a picture of the man or woman, whoever ever raised this beef, with the some kind of way that Miss Jones at the supermarket can say, hey, I know this rows for this package is fake or whatever kind of region of the country it came for. How it was cared for? It wasn't treated in a wrong way. I know I've heard every excuse they don't want to be treated that way but it's ultimately what's best for them. I don't know how they go about doing this. I'm kinda staggering and stumbling through this. I really

don't know how to go about doing it, but I think there should be some way or for her or him when they're in the supermarket or it's a steakhouse or wherever if you're comfortable if this was this was raised in the right way.

**Interviewer two** [00:16:59] Yeah, that makes a lot of sense. It just makes it a lot more personal that's why we originally wanted to do these interviews face to face. But obviously with everything going on, OSU isn't allowing that right now. But now I want you to get to think about a hypothetical traceable beef supply chain, one that is instrumented on a large-scale level that's successful. And we can imagine one that cow calf producers like yourself would like we can also imagine a voluntary traceability program that cow calf producers wouldn't would not like. I now want to ask you about what a successful and unsuccessful program might look like. So, if a beef industry adopted a traceable supply chain on a large scale that was viewed favorably by cow-calf producers in the cattle industry like yourself, what would it look like?

Theme T The Average Person Doesn't Know A Lot About the Cattle Industry

**Interviewee eleven** [00:17:48] Oh, you know, it may sound like I'm kind of contradicting some of the things I've said earlier. I want I want to add, I don't want anybody to think I'm trying to hide anything. Yes I think there is a level of not not that they're dumb or that they're ignorant, but sometimes people come out here to the ranch and they'll say, oh, I didn't know that they were standing in mud or I didn't know that they were outside during the rain. Well, some of that they just don't understand because there's a lot of people whose pets live with them in the house or maybe sleep with them in the bed. And we can't you know; these animals ultimately have to live outside. Sometimes it's not always going to be sunshine and that's great. There's some of that that people, if they don't know any better, they'd look at and say, well, I you know, I want Bossy to be able to get out of the elements and I do, too. But if I have 500 cows, I can't have a stall for every one of them. And so, you know, this part, there's there are some things that people don't really understand. They take it negatively. And those those parts of the equation that I just, you know, I don't want someone coming out here and scolding me because it's raining and my cows are standing out in it because they may not know any better.

**Interviewer two** [00:19:18] Yes, that makes sense. You definitely want someone that knows a little bit to be talking about and then also related that what would a large scale, traceable, traceable supply chain viewed unfavorably by the cattle industry, what would it look like?

**Interviewee eleven** [00:19:36] Oh, I don't know, I may not be answering these correctly.

**Interviewer two** [00:19:39] That's that's OK.

Theme I Cow-Calf Producers Concerns about a Traceability Program

**Interviewee eleven** [00:19:44] I don't know. I mean, I guess the way it is now, you know, you go into the supermarket or the restaurant or whatever and you get what you get and if you have a negative experience. I don't know how that mean I do know people that hate and I'm not I'm not going to use any particular store by name, but have gone to the supermarket bought hamburger meat went home and cooked it and said, you know, I'm not ever gonna go there again this meat is horrible. And you know that you know where it came from it would certainly be negative, I guess to the way it was. And you know it might not be anything to do with the producer and the way it was packaged. Who knows? I can see how that would affect people negatively that were innocent.

**Interviewer two** [00:20:38] Would you imagine, like a large-scale traceability system, would that involve Noble Research Institute or organizations like them in any way?



**Interviewee eleven** [00:20:49] Yeah, I guess so. I don't know how willing if they would go through the burden of that. But yeah, I guess so.

**Interviewer two** [00:20:58] Now we're gonna ask a little bit more specific questions about the traceable beef supply chain. Do you believe a traceability system is necessary to manage disease outbreaks like mad cow disease or foot and mouth disease?

**Interviewee eleven** [00:21:12] You know, I don't know how that would work if if certain regions of the country had issues with the disease or whatever. I don't know that I can intelligently answer that.

**Interviewer two** [00:21:28] That makes sense, we'll go on to the next question then. If the beef industry did adopt a traceability system, you think it should involve the USDA and if so, how?

Theme M Role of the USDA

**Interviewee eleven** [00:21:39] Well somebody would have to, you know, be in charge of it. I'm quite certain and again not to run down the government or anything like that, but you see how the post office operates and other other entities like that. I would hope that the USDA can take care of something like that. Not knowing the inner workings of the USDA. I don't know. Somebody would have to be in charge of it.

**Interviewer two** [00:22:06] Who would you think would be in charge of it, if you had to answer that?

**Interviewee eleven** [00:22:10] Well, I would like to see maybe some independent maybe somebody like Noble somebody with that type of operation similar to them that would have the infrastructure to do that. I'm not saying the USDA can't. Don't take this the wrong way but somebody would have to be in charge of it obviously.

**Interviewer two** [00:22:35] Yeah that makes that makes sense. And this is the last question. If the beef industry adopted a traceability system that enough cattle producers and the feedlots and the meat packers felt compelled to participate in order find buyers do you think that might alter the market power of cattle producers as compared to the buyers of the live cattle?

Theme P Traceability Altering Market Power

**Interviewee eleven**[00:22:58] Very possibly, you know, I think that, you know, if you're gonna implement something like this there's got to be something to pay for it. So, one end or the other there's going to have to be some give and and I hope I mentioned this correctly. Repeat the question one more time.

**Interviewer two** [00:23:21] Yeah, no problem. Like if the beef industry adopted a large-scale traceability system such that cattle producers in feedlots felt compelled to participate in order to find buyers. You think that might alter the market power of cattle producers as compared to the buyers of live cattle? I know it's kind of a tough question, but.

**Interviewee eleven** [00:23:41] Yeah, I mean, you know, it's almost like like anything else. I think the more people know about it, the more they're willing to give for it. And again, within reason, they're not going to give something outlandish for a piece of meat. But it seems to work with the organic things like vegetables and things like that. You know, if you know, know who raised it, know how it was raised and have a little bit of faith and trust in them, you're willing to pay more for it. So, yeah, I guess it would alter it.

**Interviewer two** [00:24:14] That that makes sense and that completes the questions we had prepared. Thank you so much for participating. Do you have any comments you would like to add or suggest any more questions we didn't ask that you think we should ask?

Theme B Issues with the Information, Theme C Cow-Calf Producers Willingness to Share Information, Theme F Issues with the Integrity Beef Sustainability Pilot Project, and Theme T The Average Person Doesn't Know A Lot About the Cattle Industry

**Interviewee eleven** [00:24:26] No, I think it pretty well covers it. You know again just to summarize. I think things like this are definitely beneficial for everybody. The only thing and I mentioned this earlier the only thing I would change I would kinda like to get a little bit of feedback and I might not like it, but I would like it a little bit of feedback from the people that are actually consuming the product. We we you know, we harvest our own beef here. So, we know that it is in my opinion it's excellent. And I have not ever had one person say anything negative about our beef. Maybe they were polite. I don't know but but I eat beef as much as anybody and I think it's very good product. It's good for you. I know people that don't eat it that act like it make them healthy and the sickest people I've ever seen in my life.

**Interviewer two** [00:25:20] Its moderation does a little bit of good for everyone.

**Interviewee eleven** [00:25:26] Sure and I will debate anybody about it. I may not be the best debater who ever lived, but I'm willing to tell what I know which wouldn't take long. The whole premise of this thing is just it is it to be open on this it's not something we're doing in the dark. We're not ashamed of what we're doing. I'm proud of what I do and I want to I want to put the very best product that is available. And, you know, I think that, you know, if I have a calf that I end up having to maybe treat more than once or twice or three times, there needs to be a way for that to follow me. And again, and I do a lot of dealing with with with drug reps that we buy vet supplies with or from. I talked about this often. I mean, does he need to be treated differently all the way? Is this stuff going to be clear if it fits him in a, you know, in a certain amount of time? I don't I don't care what the label on the on the what the words is on the label say. I want to know if it's if this calf, if he doesn't need to be sold or slaughtered in x amount of days, I'm gonna go above and beyond that. I don't want there to be any issues. I don't want somebody to come back and tell me, hey, you know, this was something was wrong with this or I don't think. I'm proud of the products we raised and I want people to know it.

**Interviewer two** [00:26:47] So that makes sense. I know you work hard for that. And I do want to ask you one last thing we will for one hundred hundred dollars in the mail. You receive a self-addressed stamped envelope from my professor, Dr. Interviewer one, my major advisor. And we want you to sign it and send back the receipt. So, he's he's not giving back the money. We get a mailing address and it will be one hundred dollars in cash. You don't have to write that on your taxes or anything like that.

### **Interview of Interviewee Twelve**

**Interviewer two** [00:01:28] Hey, is this interviewee twelve.

**Interviewee twelve** [00:01:30] Interviewee twelve yes.

**Interviewer two** [00:01:32] Oh, sorry for mispronouncing your name. This is an interviewer two, the grad student at Oklahoma State studying ag econ. Is still a good time to do a phone interview?

**Interviewee twelve** [00:01:43] Sure.

**Interviewer two** [00:01:44] Okay. Yes, ma'am. Well, thank you for granting us this interview. I just want to say I'm a master's student. Like I said, I'm writing my thesis on beef traceability and I'm interested in just learning about your experience in the Integrity Beef Sustainability Pilot project coordinated with McDonald's and Noble and then just about traceability in general. And then, like the the email said we are recording this interview. And then a typed transcript will be provided from the audio file so you can review it. And then the transcript will not contain any of your personal information. So, it will all remain complete completely confidential. Does that sound OK?

**Interviewee twelve** [00:02:26] Sure.

**Interviewer two** [00:02:26] OK. Awesome. Well before we get started with the questions, I just want to share with you our working definition of what we mean by a traceable beef supply chain. And a traceable beef supply chain is one where cattle and its beef can be traced from the farms on which the cattle are raised throughout the beef supply chain until the point of consumption. While single hamburger patty cannot be traced to the individual cattle from which it is made, we think that's just a little bit too unrealistic. I think it is possible it can be traced to a collection of farms. We are concentrating on a voluntary traceability system, not a mandatory traceability system. So, the producer has the choice of whether to participate or not. And then in this system, information such as farm production practices is passed down the supply chain, from producers to meat packers to retailers. And then information such as carcass quality is passed up the supply chain from meat packers and retailers back to cattle producers. Such a traceable system might operate through open markets, through vertical integration, or something in between. Does that make sense? Do you have any questions about that?

**Interviewee twelve** [00:03:33] No, I understand.

**Interviewer two** [00:03:34] Okay, awesome. Well, let's get started with the questions and the first couple questions are about your experience in the Integrity Beef Sustainability Pilot Project. What did you like about the pilot project compared to the way you normally market your cattle?

**Interviewee twelve** [00:09:35] Hello.

**Interviewer two** [00:09:36] Hey, this is interviewer two the grad student from OSU. I lost your call for some reason.

**Interviewee twelve** [00:09:43] Yeah sorry about that interviewer two. One of the perks of living in the country is a bunch of dropped phone calls.

**Interviewer two** [00:09:47] Oh, I certainly understand. I grew up on a row crop farm in Alabama and our cell service it worked outside of our levee, but once we got inside our levee, it didn't work at all.

**Interviewee twelve** [00:10:00] Okay.

**Interviewer two** [00:10:01] So I certainly understand.

Theme A Information Sharing

**Interviewee twelve** [00:10:05] Oh, back to that question, I'm trying to keep you on track. I just liked the fact it was truthful information on the good of carcass would come back to me so that I can make generic, impartial decisions, which I think helps guides a person. I heard, you know, progressively forward and hopefully and also if there was anything else of torn

that may have occurred in the whole process. Any information you hear back at all is always helpful to know for you. On how to help for generic selection, anything at all like that is always helpful. So, yeah, that was my my favorite thing about that.

**Interviewer two** [00:10:59] Yes, ma'am. I certainly understand that. Was there any information in particular that you found particularly useful?

Theme B Issues with the Information

**Interviewee twelve** [00:11:08] Well, the problem the drawback of the whole thing was that when I did get the information, it wasn't truly interpretable to me. And I never did get what I would call satisfactory interpretations of what those results were. I don't have that in front of me or anything, but it was a little bit complicated and it didn't really tell me clearly. I even asked, you know, Noble about certain things that they they kinda said well let me get back to you and they came back, you know. They basically kinda my understanding was they kinda shrugged their shoulders. I don't think they understood it. I don't know. Why the data, you know, coming back was so convoluted but it just was not clear.

**Interviewer two** [00:12:05] What what in particular made it not clear?

**Interviewee twelve** [00:12:10] Ok. One of my expectations I guess were OK, you know, I sold them how many head, I'll just say 20 head, which I know was quite a bit more. So, on those 20 head either they processed 20, you know, hopefully 20 went through whatever. It was not, you know, somebody or something fell out, you know, one maybe have died in the feedlot from bloat. You know, those are things that are unforeseen that you can't control. It's a feedlot type of a thing and sometimes they can't control that either. But then afterwards, animals are sent ???tosses??? you know what was the kill weight that you know, that they ???skewed the data???or did they just do it as a lot. You know, did they just decide that on June 10th, I'm just making things up, but that that was the day that that whole group was going to go to be processed or did they select some cattle specifically that this one gonna do this one, you know, that type of thing. That data and plus, ok, let's say that all 20 went in there and came out and you know did they grade choice? One, two, three. Did they grade, you know, prime? How did they exactly grade? You know, and what was the ribeye measurements? I didn't, you know, that was what I was hoping to get, in that was my expectations. And I feel it wasn't as interpretable as that.

**Interviewer two** [00:13:52] That that makes sense. And how do you think you correct that issue?

**Interviewee twelve** [00:14:00] Just to ???clarify,??? for producer to get understandable, clear information back as to. They had some kind of convoluted system and I don't think anybody understood it. It was like, you know, tier one, two, three or like what what is tier one, two, three. Is it good to be in tier one or is it good to be in tier three? And, you know, they oh let me get back to you. I couldn't I don't think they understood it. ???Both sides have been friendly, but??? it seems like there is something to that for that nature. But a clearer understanding as to what your how your cattle graded. Did they grade choice or prime or select? Tell me what happened.

**Interviewer two** [00:14:55] That then makes sense because any information like that would be useful. If it can actually make sense to you and you can understand it to make your operation a little bit better.

**Interviewee twelve** [00:15:06] Yes, exactly. I understand that the company's corporations have what I call coded criteria set up to have, you know, results are put back out. But for a producer, you know, I'm not privy to the inside information as to what that coded information is. It's, you know, that that doesn't help me to go forward and I don't want to go backwards.

**Interviewer two** [00:15:31] Yeah, that makes all the sense in the world. I don't I don't blame you at all on that.

**Interviewee twelve** [00:15:34] I'm not mad or anything or the other than it was disappointing.

**Interviewer two** [00:15:41] Yeah, I'm sure. And then how did you feel about sharing information about your operation and cattle with others in the pilot program?

Theme C Cow-Calf Producers Willingness to Share Information

**Interviewee twelve** [00:15:51] It didn't bother me a bit. I was glad to do it.

**Interviewer two** [00:15:55] And then what information passed up the supply chain to you did you find useful?

Theme B Issues with the Information

**Interviewee twelve** [00:16:10] I had a hard time to find something that I thought was really tangible and helpful for me as a producer to move forward. You know, the whole results, you know, what we're told by on a whole, some some Integrity Beef people that they the, you know, Wal-Mart liked it or something to that nature. They liked the cattle. But liking it is just a flimsy word in my opinion. What, you know, I need something tangible, something specific to go forward and I never did. I don't think I received anything that I would say that I especially liked that that was helpful to me. I mean, it was a nice pat on the back ???of the belly-up program.??? And the more the producers in integrity are, you know, have mixed cattle breeds. I mean by that is Noble is really big on ???herosis,??? which is great, that's fine and its good practice. My cattle straight black straight Angus, and how did I grade against, you know, ???herosis were they large, you??? know, you would expect they good chances are that they would be their weights might be heavier than mine. Did they grade better? Tell me what as a whole group, you know, just specifically tell me producer anything you see. But just tell me as a whole you know; how did how did it break up? When you look at data and I have a masters as well. There's all kinds of ways you can chop data to look at it and to tell you certain things that doesn't have to be specific. So back to your question, what was the one thing you really like? I can't tell you that there was one thing that I really liked because the data itself that came back was very nonspecific. It was specific, but it was convoluted as to how you would interpret that. And I didn't ???remember interpretation??? of what that meant.

**Interviewer two** [00:18:32] So it was basically, open to interpretation, pretty much the data was open to interpretation?

**Interviewee twelve** [00:18:40] Yes.

**Interviewer two** [00:18:40] OK. And then you talked a little bit about this, but what information did you find not useful? Was pretty much all of it not useful because of this open for interpretation?

Theme B Issues with the Information

**Interviewee twelve** [00:18:53] I was hopeful that it would all be extremely useful. You know, my walk away take away was I just kind of threw my hands up. You know, we were told that they like the cattle. Okay. Which cattle? There was at least a half dozen or more producers that participated in this, maybe a dozen. Tell me something more specific. Did they like the groups that were, you know, Charlois Angus costs? Did they like the group steaks? You can digest data,

lots of different ways or break it down. But tell me something that I can I can I can take away. It doesn't have to be related exactly to my herd. But out of all this, the person and it just ???crosses??? one of the best in the feedlot. Something, you know, things that whenever you do data or whatever you do research, you know, you have to have real, very large, real numbers. And then you have to ???I.D. the??? in order for it to really be validated. You know, I did pharmaceutical research and did research at Pennsylvania. But, you know, so I understand that this is just one step but anyways getting something that I did not find that there was anything that today that I could say that was very helpful.

**Interviewer two** [00:20:25] OK, that that makes sense. And you said already you were comfortable sharing information. What steps were taken to make you feel comfortable sharing information about your operation?

Theme D Steps Taken to Make Cow-Calf Producers Comfortable Sharing Information

**Interviewee twelve** [00:20:36] Everything is just blinded to the others. I guess it didn't really matter to me if it was blinded or not. I didn't mind participating. I have for years and have done a lot of generic programs through Angus, ???Thursday awareness and??? testing in my cattle, you know, hopefully push my my support in a positive direction as it would on the endgame that those cattle would grade higher or have carcass weights or things like the marbling would be better, that you have all these different factors, you know, with the way that we handle them, through BQA (even before BQA had come to its finish). We were always able to in a way that help gentlemen and make them quieter, calmer, herd health. All these different all the different factors. So, sharing that information, I was fine with it. They said they were going to blind it, which is typical. That's fine.

**Interviewer two** [00:21:55] That makes sense and if the pilot project was made permanent, let's say, over the next five to 10 years. Would you continue to participate in it?

Theme E Will Cow-Calf Producers Continue to Participate in the Integrity Beef Sustainability Pilot Project? and Theme F Issues with the Integrity Beef Sustainability Pilot Project

**Interviewee twelve** [00:22:05] Not like it is right now. I want to, if I'm gonna do it, I want my information to come back to me in a tangible, understandable way so that I can move forward. I'm right now I'm participating in Angus Link, which is mostly similar, but it tracks in a similar way in which all the cattle are, you know, given an Angus Link numbers which come off of what kind of cattle. All my cows have been ???gene map??? for years. And then they use the fact that what bulls that you use and then they do a population number. And then all the cattle, after they're sold, EID tags are put in and those cattle are traced and all that information of the carcass gets back to AAA (American Angus Association), which, you know, goes into the database. And then it comes back to me to tell me you'll have these cattle, you know, harvested, so that in that sale for me. And they have made a choice for how much time, so and so forth for purchasing, which there are lots of data that comes off of that. And they sell out how they died, you know, different things. So, yeah, those are the expectations. And that's why I went with Angus Link this last year.

**Interviewer two** [00:23:43] I don't I don't blame you on that for doing that. And do you believe the cattle industry will begin adopting a traceable beef supply chains on a large-scale level?

Theme O Do Consumers Care About Traceability? and Theme T The Average Person Doesn't Know A Lot About the Cattle Industry

**Interviewee twelve** [00:23:55] I believe it's inevitable. I'll tell you why because the consumer and if you follow what the consumer wants or their interests are, they are very conscientious about

animal welfare. They're very, very conscientious about what they're eating. Where it was raised? You know, the term factory farms are ???cloned??? out there too. I think that they have a vision of what a factory farm is in their head. And, you know, most all these cattle are really raised on, you know, ranches owned by families that worked very hard to produce the very best cattle and beef they can. And so, I think there's a story there for the consumer. You can help them understand. And not be so afraid of beef or meat and that, you know, we've had outbreaks of, I can't really remember now, mad cow disease. Different things and if they had confidence as to how the cattle are raised and the health of them. They're probably going to be more open to the consumption of beef and that that's what we want to do we want to make sure that the consumer's comfortable. The the rancher needs to be very open and transparent for the consumer to to be happy with what they're buying.

**Interviewer two** [00:25:35] Yeah, absolutely. So, do you think consumers care if the beef industry adopts a traceability system?

Theme K Attributes of an Effective Large-Scale Traceability Program, Theme O Do Consumers Care About Traceability?, and Theme T The Average Person Doesn't Know A Lot About the Cattle Industry

**Interviewee twelve** [00:25:43] I'm sure they don't understand what the traceability system is per say. If they were told specifically that this is what's going to happen. You know, traceability, we're going to call this a traceability program where where you buy your steak at Walmart, you can take that steak in and come home and cook it with confidence because you'll see that steak was produced here in the United States as so far from Alabama or Oklahoma or wherever. A family owned ranch that produces cattle under BQA, which they don't understand it. You give them a full story as to where this beef came from. You know, I think that we have to. I think we've got some more hurdles to go over. I don't know what the right action is right now. Now, the packinghouses are all in the headlines about the people working there getting coronavirus now. And I have a 23-year-old daughter. And so, you know, who doesn't participate on the ranch. She's in law school. (Does this need to be changed to not identify them?) You know, as a consumer and her friends are all fairly liberal and I hear them talking and they're concerned about buying, purchasing beef. You know, now because all these workers are coming out with coronavirus. So, what is there as I try to explain to you would be hard to get coronavirus on your meat. You know, now they're thinking in terms of I don't want beef or chicken. You know, they're really pushing away from all protein sources because of the coronavirus. They're afraid that, you know, that meat could be contaminated and numbers spread of diseases, it's not coronavirus but something else and so so on and so forth. And how do they know what are they doing to make our attention that it doesn't lead to some chemical on it or spraying it? Well, I you know, I hear them talk. We have to address consumer confidence head on with that from the slaughterhouses aspect and what have you. It's scaring them. So, I think that there's, you know, there's a story there that needs to be addressed.

**Interviewer two** [00:28:13] Yeah, I can I definitely see the growing trend in certain markets of consumers are definitely want to go from away from meat and are concerned about beef safety and the welfare of the animals. How do you think you get better education of consumers knowing that what you say that it's hard to get the coronavirus or a disease from a spread on a trace of meat are just learning more about the meat they consume?

**Interviewee twelve** [00:28:41] Well, just the clarity from where did it came from? I, you know, I don't know what the exact answer is, but I mean, there's something about to the nature of slaughterhouses and ranch be addressed and whether everybody in the slaughterhouse gets tested with slaughterhouses, you know, the consumer confidence commercial or some nature or they

come out or ???impresses??? I don't know. Maybe that shows that the slaughterhouse has been cleaned and that the what goes on there. To keep the integrity of the beef, chicken, and the pork, and so on and so forth. A level that the consumer can ???they have high confidence of??? what they're getting. Not to worry people over stuff. So, I don't know exactly how you go about producing it. But there's it's just going to come down to clarity for them and complete openness as to what's going on.

**Interviewer two** [00:29:54] Yeah that makes sense. And now I want to shift gears a little bit. Suppose the beef industry does adopt a traceable beef supply chain on a large-scale level, we could imagine a successful voluntary program that cow-calf producers like yourself find favorable. We could also imagine a voluntary traceability program that cow-calf producers like yourself do not find favorable. So, if the beef industry did adopt a traceable supply chain on a large-scale level that was viewed favorably by cow-calf producers what would it look like?

#### Theme K Attributes of an Effective Large-Scale Traceability Program

**Interviewee twelve** [00:30:28] I'm sure it would have to involve, well you know, where is this ranch location, if you make the parameters, the exact location of the ranch. The traceability has there ever been any outbreaks anywhere in that vicinity of where your particular property is? Where your cattle are raised? What kind of programs you follow, maybe, you know, now that ???inject??? to the next level with the Angus Link, which is their traceability and NHTC. So, I really think the consumer is going in that direction. They don't want hormones in their beef and what have you. You know, I see both sides of the equation because, you know, I know that if you get an implant to a calf at the ???proper time??? is little to no, we're already doing that. And animals are richer with their antibiotics and what have you. There are a lot of people are very concerned about that because antibiotics are showing up in the water system so on and so forth. And those are concerns. So, people want their beef and their food to be as clean as possible. So, the traceability is going to have to look like something where they can pick out that package of beef. And they don't know what that exactly is going to look like. But it's going to have to have some sort of indication that this beef was raised in such a situation that it very healthy. Very it's good to give them basics for them to understand very clear in mind, then convoluted. And have it say what it's going to look like, I don't know for sure. But they will have to do some sort of story there for them to understand that that beef was born and raised under these types of conditions to booster their confidence. I think things ???reduce signs of beef??? are in the past. During coronavirus, our phone was ringing off the hook every morning. I don't do it very often. I do it for a few friends and a couple of my friends who like oh you ???did this??? and they're very worried about going to Walmart or Homeland or whatever grocery store they go to. Because you know beef because this particular person is very into what she eats in order to protect herself from her autoimmune disease. I told her in the past. I said, listen, I will select beef for you that has never had any antibiotics, ???never an upshot.??? We raise our cattle that are personally drawn to a slaughterhouse but, you know, we've inspected the workers that we talked to. We saw this good, clean operations. We will cut the beef however you want it. And she is just, you know, just ecstatic about that because she knows that what she's getting is what I'm telling her is true. This is this is one in particular we're going to pull aside. And I'm going to raise it on feed that we give it here and not send it to a feedlot. So those those are things that ???want??? consumers with certain elements or what have you that are heightened worries, if you will are interested in. So as producers, we need to tell that story to help put them to rest. How can we assure them that the beef they pick up at the store is going to be what they want? So, I don't know if I answered your question exactly right. But I don't know everything to tell you the truth exactly of what it's going to look like. I think you're going to have leave that to the individuals and the industry members who came up with that. But it's going to have to be something very clear transparent from the



consumer to understand it quickly. They don't want to sit there at the meat case for 45 minutes to read a book on where this beef came from, but they need we need to have some industry standards that tell me quickly. Auditing and assurance that this particular beef.

**Interviewer two** [00:35:36] No that that answer was a very helpful and gave a lot of good information, good feedback back. How do you, just one thing to add to that. How do you think you find the balance of because your friend knows you and knows a little bit about your operation? How do you get that when it's when you're selling cattle and beef to someone you don't know but you want to still have that connection that they know the food you produce is safe?

Theme K Attributes of an Effective Large-Scale Traceability Program and Theme O Do Consumers Care About Traceability?

**Interviewee twelve** [00:36:05] Well, you know, that goes forward as her name is Marie (Do I need to remove Marie). So, Marie has friends that I don't know. And she was talking to them or whatever group setting or personal setting that she goes to and they recall that I'm so and so and one of Marie's friends and I heard that you produce beef. So that's you know, that's how gossip. So, they would call me we sure would like to have a side of beef or quarter beef or blah blah blah. And that does not have any antibiotics or doesn't have any hormones. It was all natural. I know I'm I'm a producer and I don't, you know, think they understand the whole program. I'm not a feedlot. I feed, and you understand, you know, as being a rancher as well, we would feed a few out every once in a while, to keep our own freezers full. A lot of times growing up, you know, I remember, you know, we usually fed up the ones that didn't go on the truck. The one that broke his leg, you know, had lock jaw, or something. Well, you know, the consumer, the Maries of the world, that have autoimmune disease, they aren't gonna want that. That's what she would probably say. So, there's there's a story there now and how that goes forward is that, you know, once you gain confidence, one consumer will spread to others who feel you have to be a lot of integrity it's sincerity. There has to be a lot of visibility, clarity. The stories has to it doesn't have to be a lot of fluff, but the consumer needs to understand that this is this is our how production happens. ???Then results or beef being purchased at the store, how these markets check and there's markets for all kinds of beef.??? My neighbor he raises Wal-Mart beef, which is a terrible thing to say now because Wal-Mart has actually picked up their game quite a bit. And that he has buys stockers from Florida, from Mexico, from wherever and they're just kind of a mixed bag by ???this sort of thing that, you know, all real beef steers or something. They're a code hunger.??? And so if the consumer understood the stories between my neighbor and myself. A lot of consumers are not going to care. All I want is the least expensive beef I can get and that's going to be him probably because he doesn't worry or care or produce on basis of genetics. His selection criteria is buying the least expensive stockers he can, put them on a lead of grass, raises them a certain way, and sends them to a feed yard. That's his story. I'm not trying to glaze it over. He uses his land that's the way. There's a market for that. We eat a lot of hamburgers and, you know, In and Out burgers, McDonalds, Burger King, and so on and so forth. And that's typically a lot of what that beef goes into. I can't imagine how many tons and tons of billions of tons of hamburger we would have to produce a year to supply all the burger chains and taco chains, all all of that. So, there's just lots of stories, you know, 44 Farms, I work with them quite a bit. They have really gotten in a big partnership with Wal-Mart. Just the other day, they raised a story from Newsweek ???about how many bulls and in particular??? talking about how he produces so many. You know the guy that does all the A.I. technicians who doesn't necessarily even know who 44 Farms is. He came ???with a guy with A.I. cup to put the cows in. He was do you know who that??? top game boy is. I aid oh you saw that in the Newsweek article. He said yeah. Where do you find a dude just to raise all the beef by top gain for Walmart? That is not exactly what's going I said we're

promoting this one particular ???bull as??? mature, when it was over its turn or it's just a big hunk of meat or it's just a big, beautiful bull. He's raising lots of sons and so on and so forth. What the story the basic story is that so much of genetics is a huge component of, you know, oh, what the beef is going to be like in the future. Walmart just doubled its partnership with 44 Farms, in which 44 farms, has two ???corpses in quotes in a considering cooperating with her because they bought cows both dramatic weight and got bulls back from them.??? You know, so we we they basically know the genetics that we're using our genetics programs. So, we can all funnel through them to get to Walmart. If you decide to send your check off to them through their buyback program, they're telling the story to Newsweek and it's adding to consumer confidence. People look at this bull and the stories is he's got a life of leisure, he's out here in this beautiful pasture, all these wonderful cows. So, consumers are into that and I think isn't that sweet, look at the babies and, you know, they see all that. And it's not you know, it's just that they drive through the country going from Oklahoma City to Dallas, they see pastures with cattle in it and that's what that is. You know you know, what they're saying and not the factory farms is what they I don't know what their conception of a factory farm is. So, there are stories to tell. And I don't know if I answered your question still, I have been rambling.

**Interviewer two** [00:42:56] No, that was that was helpful. And if the beef industry did adopt a traceable supply chain on a large scale that was not viewed favorably by cow calf producers. What would it look like?

Theme I Cow-Calf Producers Concerns about a Traceability Program and Theme G Are Cow-Calf Producers Open to a Large-Scale Traceability Program?

**Interviewee twelve** [00:43:09] I don't know what it would look like. I I I tend to think that being in lots of different organizations OCA, TCFRA, the Noble Foundation and being around producers, especially older producers. I guess I'm an older producer now, unfortunately. But I I see them feeling threatened that, you know, that somebody's going to come in and and do an audit of their ranch and not like this. You know, they're going to be publicized or humiliated or some, I don't know what that is in the back of their mind, but they don't want any overstep. Ranchers are very independent people. You know, if you look at farmers will do a lot of co-op programs and do co-ops. Farmers will do co-ops, what have you. Ranchers in the past, right now, they don't have any. They don't do co-ops, which gives you a sense of the mindset. Everybody is very independent and they like doing things their way and they don't want anybody else telling them what to do. And then you have the ranchers that maybe are a little bit more progressive. My sense is that, you know, if this is this is the criteria, we get to meet in order to have premium pricing on my cattle, I don't mind doing it. The A.I. technician, who is about the same age as I'm, it has an interest in bringing up ???the Newsweek to farmers.??? Is that it do they buy those cattle back from you? Yes, they do. What do you have to do? Well, they have a whole set program. We have to be BQA certified. You have to give these kinds of vaccinations and your cattle have to have not any hormone implants, and then you contact them. You have to use certain genetics to qualify, to be in that program. And he said do you get premiums? I said yes you can get your premiums for participating in those programs. And you have to be audited, you know, it was something he was thinking about. This is a, you know, nice ???sir.??? He's like I'd like to get a premium instead of running my cattle up to Oklahoma City, you know, getting the generic answers of ???bringing P.M. price wise.??? So people are open to it. Other ranchers aren't going to like it being told what to do. I have an uncle who is in his 90s and his grandson that runs his ranch and he vaccinates the cattle and calves when he wants to. And some years that he doesn't want to, he doesn't. He's going to be very opposed to seeing any kind of program like those as such or having any kind of traceability or anything. He wants to do what he wants to do when he wants to do it. And that that kinda mentality. So, yeah, there's going to be opposition. There's

going to be things they don't like. But I think it's going to be the older generations and it'll be a mixed bag. I mean, there's just going to be people that, you know, I'm not going to participate. Well fine, that's you know, if you say what has to be a hundred percent. There's always going to be a market, and I'm sure some other backdoor market for people that don't want to participate or what have you that wants to go a different way. I can't, you know, you'll never get a hundred percent cooperation from everybody no matter what you do.

**Interviewer two** [00:47:16] Yes. That's that's very true.

**Interviewee twelve** [00:47:20] Somebody is gonna find something they don't like no matter what.

**Interviewer two** [00:47:23] Yeah, absolutely on that. And then what information about you and your operation do you feel comfortable sharing with others in a beef traceability system?

Theme C Cow-Calf Producers Willingness to Share Information

**Interviewee twelve** [00:47:35] I don't mind sharing anything and everything. And we keep tons of records. We are a family, you know, operation. My husband and I and I have a daughter, and obviously she doesn't really participate on the ranch. It's not her thing. If somebody wants to come out here, you know, they're more than happy allowed to come out. I have people that I buy things from. I'll have them come out but, you know, they have seen cattle, you know, roaming around and what have you. I had a couple people that, you know, brought me hay last year and he stopped one day and came over and started talking to me after he got unloaded and he said have you ever sold some of your heifers. I said of course. He said ma'am you have the nicest cattle. You know, I'm open if somebody wants to come out and, you know, see how gentle the cattle are or what they look like, how they're handled. I'm an open book. I don't care. Come on. See whatever you want to.

**Interviewer two** [00:48:40] That's understandable. And do you believe a traceability system is necessary to manage disease outbreaks such as mad cow disease or foot and mouth disease?

Theme I Cow-Calf Producers Concerns about a Traceability Program, Theme N Managing Food Disease Outbreaks, and Theme H Voluntary or Mandatory Traceability Program

**Interviewee twelve** [00:48:52] Absolutely. Absolutely. We have to be aware of that there's something else lurking in the in the future. And I don't know what it is, nobody can foresee everything that will come about. And we have to participate. We have to be aware and do things that will help us specifically isolate outbreaks so we know where they are. How we what are we going to do to alleviate this, eliminate it, and move forward? Because if we don't, then we appeal, pardon my French or my bad language, but it will be a big cluster fuck. If you don't have, you know, everybody specifically identified for where you can trace back to it. Then you have to look at it as a whole. Just like I made a baked potato last night that had a little bit of what I call a cancer, bad spot on it. So, I cut it out. I can see that the rest of the potato was good. If we don't do that, then collectively or bad, if we traceable, then we can find out. And that's what a lot of people I don't want somebody come back on me. It's they're going to help you. The USDA is going to help you. They're gonna find out that you have a mad cow or did you have mad cow? You know, I'm sure there'll be some assistance or whatever. You've got to be able to to identify that, take care of it. And so that we can all move forward in a positive direction. It's just a normal chore thing. I think it needs to be mandatory thing. And I'm sure there'll be a lot of pushback from lots of people. I'm I'm fine with it.

**Interviewer two** [00:50:43] Yeah, that's I don't blame you on that. Do you think some form of like liability insurance would help more producers come on board if they know if like say, your cattle was traced to mad cow disease that you wouldn't be wholly liable for it? So, you wouldn't be punished for it. Would that help?

Theme J Insurance Policy and Theme W Cattle Industry not a Profitable Business

**Interviewee twelve** [00:51:03] That's a tough question. If you said to me, do you want to buy liability insurance for your cattle? How expensive is it going to be? I mean, my God, our profit margins now right now are in the negative because of the market as it is. How much more can the farmer and rancher take on expense wise to produce the best beef? If it's something that the government, you know, wants to hand out? That's a different thing. But I don't know that the ranchers, farmers, that the markets right now like it is and has been for some time can handle. And that's a I think that's something that the consumer and more people need to understand is that ranchers and farmers are not don't rely on other income such as oil, gas. There is a huge number of producers that have enormous incomes like Bob Funk and from his express personal informant. And they are bottomless to the bank and other oil and gas people and other people that are in the industry, they're not necessarily reliant on that herd of cattle every year providing them the income to keep moving forward. If you keep stacking up insurance or other expenses, even if it's, you know, a reasonable amount and just, you know, people or it's just for the regular producer such as myself. It is a burden. It would be nice if, you know, that that's insured, in some way or fashion that if there was something that you could agree to, maybe something more than just an insurance that you purchased, but maybe something with the USDA, because of everybody participates in, we will cover you or we will do something for you if you participate and do these things. We'll provide you with that insurance. That's another avenue possibly. But if you ask the producer to purchase insurance, I think there will be a huge pushback. I don't think you will get much participation, well maybe the producers, such as the Bob Funks and those that aren't relying on, you know, the cattle to actually produce an income.

**Interviewer two** [00:53:38] That that make sense. And you mentioned the USDA a little bit. If the beef industry did adopt a traceability system, do you think it should involve the USDA? And if so, how?

Theme M Role of the USDA

**Interviewee twelve** [00:53:50] I don't know how you would not involve the USDA, they're basically the government governing body for food production. So, I mean, what what would you think that it should go to? I mean I to me, I would say USDA because that's the big government ???body,??? such as if I had taken an ibuprofen and that's something tainted with that ibuprofen, it gets traced back to the facility. Who does the traceability? The USDA does. They're the head governing body. They will take that on and do the traceability and who will tend to it and do the inspection of that facility and find out what happened. So, you know, that's what we have, you know, bodies of governments that oversee that. I don't know who underneath it. They may pass it off to somebody else. I don't know. But that's what I would expect to be over head oversight of it.

**Interviewer two** [00:54:56] That make sense. And if the beef industry adopted a traceability system such that cattle producers felt compelled to participate in order to find buyers. Do you think that might alter the market power of cattle producers as compared to the buyers and live cattle? And if so, how?

**Interviewee twelve** [00:55:20] Say that one more time.

**Interviewer two** [00:55:20] Yes, ma'am. It's kind of a lengthy question. We're basically asking if the beef industry adopted a traceability system such that cattle producers felt compelled to participate in order to find buyers. Do you think that might alter the market power of cattle producers as compared to the buyers of live cattle?

**Interviewee twelve** [00:55:43] If it will alter the producers?

**Interviewer two** [00:55:46] Yes, the market power of cattle producers, yes, ma'am.

Theme P Traceability Altering Market Power

**Interviewee twelve** [00:55:50] I think that if there's a premium there, I think yes, I think the producers will gravitate towards that. The ones that are serious about making a ???profit, turning a profit, moving??? their cattle forward. I don't know that everybody will. But again, there's always groups of people that are going to go like I'm not going to do that. You know, I don't have the man power. And they some of it is just an educational thing. It's not necessarily a man power thing, but, you know, keeping good records and so that you know and how you keep the records. So, one of the things, you know, a teachable thing that can happen if they're willing to learn, you know. But I would think they would. But there will be always some groups that won't.

**Interviewer two** [00:56:54] OK. Do you believe the cattle industry will go the way of the swine and broiler industry where it's almost like contract farming?

Theme Q Risk of the Cattle Industry Turning into the Swine and Broiler Industry

**Interviewee twelve** [00:57:03] I hope not. I don't see that as a positive thing for ranching at all. Where like Tyson, the biggest producer says, ok I'll pay you a contract. That's to me that is factory farming, factory ranching, or whatever. Where the big corporations own your ranch. Tell you what to do or how to do it. There will be a huge revolt from the ranchers. I don't think they will abide by that at all

**Interviewer two** [00:57:34] Yeah, that's understandable. And that completes the questions we have prepared. Thank you for participating. Do you have any comments you'd like to add or just suggest any questions we didn't ask that you think we should have?

**Interviewee twelve** [00:57:48] No, I think that was pretty comprehensive.

**Interviewer two** [00:57:51] OK. Awesome. Well, one last thing before I let you go. I do want to get your mailing address so we can send you a hundred dollars in cash so you don't even have to write it off on your taxes or anything like that.

**Interview of Interviewee Thirteen and Fourteen**

**Interviewee thirteen** [00:00:45] This is interviewee thirteen.

**Interviewer two** [00:00:46] Hey, this is interviewer two. And I'm a graduate student studying ag econ at OSU is this still a good time to interview you?

**Interviewee thirteen** [00:00:56] Yes, it's. I have got a gentleman here named interviewee fourteen. He is on our team at the ranch and could probably benefit from your questions.

**Interviewer two** [00:01:12] OK. That's awesome. Yeah. Any any answers would be would be awesome to hear. Well, thank you again for granting us this interview. Like the email said all this,

we are recording this interview and a typed transcript will be prepared from the audio file and all your information will remain confidential. Is that OK?

**Interviewee thirteen** [00:01:37] Sure.

**Interviewer two** [00:01:38] OK. Awesome. Well, before I get started with the questions, I want to share with you a workable definition of what we mean by a traceable beef supply chain. And a traceable beef supply chain is one where cattle and its beef can be traced from the farms on which the cattle are raised throughout the beef supply chain until the point of consumption. While a single hamburger patty cannot be traced to the individual cattle from which it is made, we think that's a little bit too unrealistic. It can be traced to a collection of farms. We are concentrating on voluntary, not a mandatory traceability system, so the producer has the choice on whether they want to participate or not. And in this system, information such as farm production practices is passed down the supply chain, from producers to meat packers to retailers. Information such as carcass quality is passed up the supply chain from meat packers and retailers back to cattle producers. And such a traceable system might operate through open markets, through vertical integration, or something in between. Does that make sense or do you have any questions about that?

**Interviewee thirteen** [00:02:42] None of it makes any sense to me. What is it you're trying to gather?

**Interviewer two** [00:02:47] We're trying to gather information about your experience in the Integrity Beef Sustainability Pilot project that was coordinated through Noble and McDonald's and then your thoughts on beef traceability in general.

**Interviewee thirteen** [00:03:05] So you're talking specifically about that test that we participated in?

**Interviewer two** [00:03:12] Yes sir the pilot project.

Theme B Issues with the Information, Theme F Issues with the Integrity Beef Sustainability Pilot Project, and Theme W Cattle Industry not a Profitable Business

**Interviewee thirteen** [00:03:16] Okay, well, all we got out it are some results that we got to go over with, one of your reviewers. Let's say it's nice to know and the information. The I Beef Program itself doesn't fit our view of it because we don't, I don't like backgrounding with feed and then selling them all in December. We came from a spring program, calving program to a fall calving program. And our goal is to to wean and sell a seven to eight weight animal within 13 months or so. And the program I've got to say I've advertised my cattle for sale through I Beef. I've advertised pairs through I Beef. I've never gotten one phone call, one producer. There's absolutely no interest in the cattle whatsoever that I can detect when it comes to selling my cattle on superior, which is how I market them. I have reputation repeat buyers that are all very happy with it. By happy I mean they seem to pay the tallest price of the day. And my cattle are straight Angus. And I have a really good genetics from the Schaff Angus Valley primarily. And, you know, all I can say is we work our butt off to comply to the standard when it gets up to the selling part. You know, everything is more or less law. At that point, nobody cares if they were raised on a Noble program. They just care whether they died or not. So, the program has helped make me a better cattleman and has helped me refine my medical protocol to where it's pretty darn dependable. Every year I can depend on healthy cattle. My breed up and my breeding is is at least average or above. But I'm I'm disappointed as a businessman what a sorry business it is. And and I really don't understand why the Noble Foundation doesn't promote the fact a little bit more

because beef are not profitable operation. I mean, if I don't charge anything for my ???labor,??? you know, that change the economics. But, you know, it's just everything we do just send send send. And you can barely eak out, you know, after a hard year worth for hundred dollar a head profit. So, we use our future, use good management techniques, and cost control. We measure our KPI numbers. And just like everybody you do good on some of them and some of them are beating you up, you know.

**Interviewer two** [00:07:45] Yeah that's life.

Theme F Issues with the Integrity Beef Sustainability Pilot Project and Theme E Will Cow-Calf Producers Continue to Participate in the Integrity Beef Sustainability Pilot Project?

**Interviewee thirteen** [00:07:46] So, I'm not complaining. But I started with the Noble Foundation about thirty-nine years ago. And each year I've been with them, they're harder and harder and harder to get in touch with. And the meetings are further and fewer between. And in a way, I've kinda lost my focus with what to do with this program. Because, you know, here's to how well recognized it's or it isn't. It doesn't seem to add any value nor do any of the other programs. You know, you go through the Source Age Verification the Angus Program. You name the program that pays a bonus and they pay about 20 cents a pound, which barely offsets the cost to gain for taking the implants out, doing something like that. So, you know, I have to use implants, good feed. I'm a I do not feed grain products on my ranch. I feed high energy ???DDT??? cubes, which are very hard to come by. So, I feed high energy ration, native grasses. And then I wean on quality hay 10-12-14 percent protein range high 50s or 60s, ???you can get.??? And the fellows up there at Noble are smart cookies but they're so buried in projects and work that it's hard for them to tailor things. You know, so when it comes to participating in this program, I'm ???tender footed??? to try their feed this year, even though I can deliver my some of my calf crop in the March April market next year. And I'd be interested to test again and see if I can replicate or do better. And I might even participate. I think I fed my cattle at ILS (Innovative Livestock Services). And I think a fellow named Zeke. But, you know, I have I sell have a thousand head of cows. And we're trying we raise our own replacement heifers and kinda have a different mix than the straight-ahead terminal growth rate. We don't have any sale barn cattle on our place at all. Everything we sell is ???grade.??? So I'm real interested in another trial so I can learn a bit more to see if I improved on some of my statistics and would really enjoy that. But as far as the program interested in my cattle or interested in buying them or feeding them, even when I send the lot members to Noble to circulate, I'm under the impression that my marketing guy has been the one. So, and the I Beef buyers has not shown any interest. And I've been doing it for ten years or so.

**Interviewer two** [00:12:07] Yeah, I can see how that would be a frustrating situation. I'm sorry you feel that way about Integrity Beef and Noble. How do you how do you think you correct that issue of feeling more like your information matters?

Theme A Information Sharing and Theme W Cattle Industry not a Profitable Business

**Interviewee thirteen** [00:12:22] They've grown the organization so much and involved a lot of ???key.??? In a way, ???I'm glad with??? it in the way they need to, you know, I like to do the best I can and then come back and review it. So, I send in all these numbers every year. But I don't I don't know that I get anything statistically or anything back. It's very hard to book an appointment, like I said. And I miss the time just to visit. But they don't have time to do that. But just say at this point in my career and life, I'm seventy-six (Do I need to just elderly). What I found is everything I started takes about two or three times longer than I thought. And we have evolved so much from when I first started. I've given all the credit to the inspiration from the

Integrity Beef Program, you know, has taught us how to be sharper on buying our bulls. We we AI (artificial insemination) quite a bit. We never had done that before. So, you know, we have some successes. But our biggest challenge is paying our overhead making a profit with these commodity prices. There's nothing that's your fault or it's the fault of the program, I think it's the business. It's a sorry business. The cow-calf business if it's not good, it's a sorry business. I've got a man here, who's a banker, he's watched everybody in North Texas do it every way come Sunday. And he does our KPI of review. His name is interviewee fourteen from Texas. And he's active in cattle organizations. So, he understands what I'm up against and how I've done. And I'm glad he's here to talk with us to hear what you have to say. We did not really know what to expect, you know, in terms of the phone call.

**Interviewer two** [00:15:19] Yeah, I think I mentioned this, I may not I'm a graduate student at Oklahoma State and I'm writing my master's thesis on beef traceability, so I'm involved with Oklahoma State. And you did actually a really good job of answering our first couple of questions, which were all about the Integrity Beef Sustainability Pilot project. Like what would you recommend changing about the project? What information passed up the supply chain did you find useful? How how did you market your cattle compared to the way you normally market your cattle by being in this project? You really did a really great job of explaining that. So now I wanted to shift gears a little bit to beef traceability on a larger scale issue.

**Interviewee thirteen** [00:16:03] Wait just a minute I couldn't understand what he said. Can you repeat what you were trying to explain then?

**Interviewer two** [00:16:13] Yes, sir, I can do that. I'm I'm a graduate student at Oklahoma State, so I'm writing my master's thesis on beef traceability. And my job is to interview producers who participated in the Integrity Beef Sustainability Pilot Project. And ask them the first couple questions were about their experience in this project, which you did a really good job of explaining and actually answered a lot of the questions that I had for the first part of the interview about like, what did you like about the pilot project and what did you not like compared to the way you normally market your cattle? What information passed up the supply chain did you find useful and not? And then if you if the pilot project was made permanent, would you continue to participate in it? You really did a good job of explaining what the pilot project asked you to do, what you did. And and then like your struggles with Noble and everything like that, you did a really good job of explaining that to me.

Theme E Will Cow-Calf Producers Continue to Participate in the Integrity Beef Sustainability Pilot Project?

**Interviewee thirteen** [00:17:18] We really would like to do it again. So, we can determine whether we have improved or addressed any shortcomings. And I've done that through changing the bull springs, and cows, and diet.

**Interviewer two** [00:17:36] Yes sir.

**Interviewee thirteen** [00:17:38] I'm very interested in doing it again.

**Interviewer two** [00:17:42] Well, that's that's that's good that's good to hear. And then do you believe the cattle industry will begin adopting traceable beef supply chains on a large-scale level?

Theme A Information Sharing and Theme S Concerns About Importing Foreign Beef

**Interviewee thirteen** [00:17:55] I'd say so we we see the value in it. And I don't want to eat South American beef or Australian if I can buy American. It burns my ass that right here in the



middle of a crisis they shut down the feed plants and then they're importing foreign beef. Any out here to the politics about businesses to. You just contact me anytime. It's hard for me to know what more questions to ask about this sustainability test. The first very first time I ever had a chance to, you know, see what you measure and how you measure and then have a conversation with someone about what it all means. It looks like everybody is raising really competitive cattle out there.

**Interviewer two** [00:18:59] Yeah, it definitely it definitely definitely does. And then suppose the beef industry does adopt a traceable beef supply chain on a large-scale level. We can imagine a successful voluntary program that cow-calf producers like yourself find favorable. But we can also imagine a large-scale traceability system that cow-calf producers like yourself do not find favorable. So now if the beef industry adopted a traceable supply chain on a large-scale level that was viewed favorably by cow-calf producers, what would it look like?

Theme R Traceability in Other Countries

**Interviewee fourteen** [00:19:36] I'll have to try to help you answer that. I agree with the traceability issue. I think to support consumer confidence and for consumers to continue purchasing our product. They're wanting to know where it came from. We need to have traceability on that. We're one of the few countries that doesn't have traceability all the way through the supply chain. So, I applaud your efforts in trying to get that established. I know it's going to be somewhat of an uphill battle because producer's perception and changing management practices. But it is something we need to strive for.

**Interviewer two** [00:20:24] Yeah, absolutely. How do you think we get that on a large-scale level traceability because the United States is falling behind other countries in that aspect?

Theme R Traceability in Other Countries and Theme L Large-Scale Traceability Might Force Some Cow-Calf Producers to Leave the Industry

**Interviewee fourteen** [00:20:35] You know, its profitability is one thing, trying to get a little more ???opportunities??? out there. The other is, I think the United States versus Brazil and other countries, the average beef production herd of U.S. producers is less than 50 head. So, getting all of those weekend warrior cattle producers to do that, is very difficult. I think your your larger operators, like interviewee thirteen can do it, and see some benefit from it. But that's that's a small percentage of the total cattle production.

**Interviewee thirteen** [00:21:15] I think you need to survey are these put together cattle or are they ranch grazed cattle. I'd say that's one. Try not to add another ???lump??? cost. Every time you need to know something, they won't take your word for it you have to join some group and then pay them a fee, you know, the third-party verification. It just seems like it's never enough. So pretty much all of these fees we have to pay these ???fees check off??? commission. And then we get to sell our premium product and fight over the price.

**Interviewer two** [00:22:15] Yeah, I know. I'm more familiar with row crops. I grew up on a row crop farm in Alabama, but I know row crop farming is very expensive. And it seems like from my research on the cattle industry, it's it's the same way. It's a very, very expensive industry.

**Interviewee thirteen** [00:22:31] Yes sir.

**Interviewer two** [00:22:33] And then if the beef industry adopted a traceable supply chain on a large-scale level that was not viewed favorably by cow-calf producers, what would it look like?

**Interviewee fourteen** [00:22:45] What was that question again?

**Interviewer two** [00:22:45] It was, if the beef industry adopted a traceable beef supply chain on a large-scale level that was not viewed favorably by cow-calf producers like yourself, what would it look like?

Theme K Attributes of an Effective Large-Scale Traceability Program

**Interviewee fourteen** [00:23:07] Not favorable, you know, I guess I don't really know how to answer that. The way it is, you know, the time in the money. That's the two key key things that producers are gonna be looking at, do they have the time and the facilities? Some of these smaller producers, they really don't really have a set of working pens and facilities to handle the cattle. They just turn cows out to the pasture and gather them up when they needed one. They're probably calving twelve months out of the year. There's no pattern there, you know, when they're marketing their cattle. So, it almost has to be done at maybe a sale barn level. Where they could if they came in and if Joe Smith, you know, brought those cattle in creating it that way.

**Interviewer two** [00:24:06] Yeah, that that that makes sense and then what information about you and your operation do you feel comfortable sharing with others in a beef traceability system?

Theme C Cow-Calf Producers Willingness to Share Information

**Interviewee fourteen** [00:24:18] Yeah, just about any of it. Genetic, time frame that the calving, marketing and, you know, that the ranch is BQA certified. They got the records on the medication, when cattle are medicated, withdrawal day.

**Interviewee thirteen** [00:24:44] We really out of all the cattle we run, we really don't have to use any antibiotics except for foot rot or lame or a snakebite. We don't have respiratory problems. So, we're really fortunate and, you know, I attribute this to an employee at Noble and I Beef protocol.

Theme K Attributes of an Effective Large-Scale Traceability Program

**Interviewee fourteen** [00:25:15] You know, one thing that the amount of time that we merchandize cattle if we can just cut that down instead of going to one sale barn those cattle comingle and go to another sale barn and another sale barn. It increases the difficulty of tracing. It helps, like interviewee thirteen is doing, he sells the majority of his cattle they go directly from his ranch to the feed yard and don't have to go through the sale barn to comingle, sorted, ???dressed.??? So that's that's one I think that the industry needs to do more of.

**Interviewer two** [00:25:58] OK. That makes sense. And do you believe a traceability system is necessary to manage disease outbreaks like mad cow disease or foot and mouth disease?

Theme N Managing Food Disease Outbreaks

**Interviewee fourteen** [00:26:09] Yes.

**Interviewer two** [00:26:10] OK, why do you say that?

**Interviewee fourteen** [00:26:14] Well, we need timely, you know, if we did have an outbreak of any of those diseases it's a timing issue. The faster we can identify and isolate the set that are going to have a recovery period.

**Interviewer two** [00:26:31] OK. And then if the beef industry adopted a traceability system, do you think it should involve the USDA?

## Theme M Role of the USDA

**Interviewee fourteen** [00:26:43] That's the difficulty in almost has too, it almost has to involve the USDA for some type of government oversight. But I think it could be outsourced through a private private groups that would probably be managed a little better.

**Interviewer two** [00:27:06] Who who would you have in mind if it was outsourced to a private private company?

**Interviewee fourteen** [00:27:11] You know, maybe that IMI Global or some of those groups that are the front leaders right now in the E.I.D. tags.

**Interviewer two** [00:27:22] Okay. That makes sense. Would would the USDA have any role in it? What would their role be in a beef traceability system?

**Interviewee fourteen** [00:27:31] Maybe an oversight.

**Interviewer two** [00:27:34] OK, that that makes sense.

**Interviewer two** [00:27:35] And then if the beef industry adopted a traceability system such that cattle producers like yourself felt compelled to participate in order to find buyers. How would that alter the market power of cattle producers?

**Interviewee fourteen** [00:27:52] How would it improve the market power of the producers?

**Interviewer two** [00:27:56] How how would it change the market power either good or bad in the terms of producers?

## Theme P Traceability Altering Market Power

**Interviewee fourteen** [00:28:04] That kinda of an unknown. We would hope that it would improve the marketing power of the producer, but until the consumer and the packer, I think the packers gonna be one of the main bottlenecks of this operation. They're not willing to pay for it. If they pay an additional for the cattle, then it's negated on whether anybody going to spend the time to do it.

**Interviewer two** [00:28:33] Do you think the packers will pay more for it?

**Interviewee fourteen** [00:28:37] They're going to have to or somebody is going to have to. Yeah

**Interviewer two** [00:28:41] Yeah, that that makes sense. Somebody is going to have to pay more because it does cost more to implement a traceability system. And then do you worry that a traceability system might make the cattle industry more like the swine and the broiler industry, where it's more like contract farming?

**Interviewee fourteen** [00:28:59] Repeat that.

**Interviewer two** [00:29:03] Yes, sir. Are you concerned that a traceability system might make the cattle industry more like the swine and the broiler industry where it's more like contract farming?

## Theme Q Risk of the Cattle Industry Turning into the Swine and Broiler Industry

**Interviewee fourteen** [00:29:13] I don't think so. Just because of the time and capital investment in the cattle industry versus the pork and the poultry. You take the time that it takes to incubate an egg all the way through the process of it being on the plate for both pork and poultry is a lot faster, less capital investment, less land than the cattle industry.

**Interviewer two** [00:29:44] That that makes sense. And then do you think consumers care if the beef industry adopts a traceability system?

Theme O Do Consumers Care About Traceability?

**Interviewee fourteen** [00:29:52] I think that trend is changing as more and more people interested in it today than they were 10 years ago. I think it will be even more so in the next 5.

**Interviewer two** [00:30:03] Why why do you say that?

**Interviewee fourteen** [00:30:10] I think people are more inquisitive today about where their product comes from, and they're asking more questions and they want to see that. We live fairly close to the Dallas Fort Worth area. We're seeing a lot of consumers wanting to come out and where did that calf come from? What was the heritage? How was it handled? Where was it processed? And they're wanting to do more of the direct purchasing they're than going through the chain store.

**Interviewer two** [00:30:45] Yeah, I can see that. I know today's consumers a lot more concerned with where their beef comes from and the meat in general, where there consuming from is coming from.

**Interviewee fourteen** [00:30:56] Right. I think that that's what we make. We have to set number one we have to set aside a consumer or we're going to lose product share. But we've got to do it somehow.

**Interviewer two** [00:31:10] Yeah, that makes sense. And do you think a traceability system might lead to smaller producers being out of business or being let out of the beef industry?

Theme L Large-Scale Traceability Might Force Some Cow-Calf Producers to Leave the Industry

**Interviewee fourteen** [00:31:23] No, I don't think so.

**Interviewer two** [00:31:24] Okay.

**Interviewee fourteen** [00:31:27] Because there's land use. There're numerous small tracts of land across the country that that to some extent a lot of areas it's a lifestyle. You got your producers that have 10-15 head of cattle they try to make a little profit off of it. But the end of the day, they go to the coffee shop and say they got some. There interested in it, you know, and they sale those calves at the local sale barn. They brought whatever it did. They got bragging rights.

**Interviewer two** [00:32:03] That that makes sense. That completes the questions we had prepared. Thank you again for participating. Do you have any comments you would like to add or suggest any questions we didn't ask that you think we should have?

**Interviewee fourteen** [00:32:18] No, not really. Just let them know at the company level, we appreciate their efforts, although we don't always know what they're up and we would love an opportunity to participate again and look forward to it.

**Interviewer two** [00:32:39] Well, that's that's good to hear. And I'll be sure to mention that in my thesis when I write write that up as well. But one last thing before I let you go. We do want to send you both one hundred dollars in the mail for participating, and it will be in cash so you don't even have to write it off on your taxes or anything. Can I get you guys mailing addresses?

### **Interviewee thirteen callback.mp3**

**Interviewee thirteen** [00:00:27] This is interviewee thirteen.

**Interviewer two** [00:00:32] This is interviewer two. I'm the grad student from OSU you talked to earlier. I got a call from your secretary, I guess, saying you wanted to speak to me again.

Theme A Information Sharing and Theme E Will Cow-Calf Producers Continue to Participate in the Integrity Beef Sustainability Pilot Project?

**Interviewee thirteen** [00:00:40] Oh, yeah. Thank you for calling back. Well, I was just gonna add the the marketing information I got from it was really good, and I would like to participate from that standpoint, you know.

**Interviewer two** [00:01:01] When you when you say the marketing information, is that like the carcass quality or what do you mean by that?

**Interviewee thirteen** [00:01:06] Yes, sir. The carcass merits all that.

**Interviewer two** [00:01:11] OK. Yes, sir. What what made it really good?

**Interviewee thirteen** [00:01:17] Well, in that you can state it. You know, you could say what your prime to choice ratio was. You could tell them how many died. You could tell them how they performed and you could talk about the cost of gain all of that.

**Interviewer two** [00:01:35] That makes sense and is a good way to compare to other producers how you doing.

**Interviewee thirteen** [00:01:39] Yeah. And then if we changed some cattle and some genetics, we're gonna have some improvements, maybe. So that's another reason to want to be able to see the data.

**Interviewer two** [00:01:55] Oh, yeah, I can I can certainly I can certainly see how that would be helpful.

**Interviewee thirteen** [00:02:00] Yes, sir. And of course, we don't get to see that ever. No one does that kinda of in depth. They don't even do a cursory one to share with you. So, unless you own the cattle.

**Interviewer two** [00:02:16] Yeah. Pretty much.

### **Interview of Interviewee Fifteen**

**Interviewee fifteen** [00:00:21] Hello.

**Interviewer two** [00:00:22] Hey, is this Interviewee fifteen?

**Interviewee fifteen** [00:00:25] Yes.

**Interviewer two** [00:00:26] Hey this is Interviewer two the grad student studying ag econ at OSU is just still a good time to interview you?

**Interviewee fifteen** [00:00:33] Sure.

**Interviewer two** [00:00:33] Ok Awesome. Well, first off, thank you for granting us this interview. I'm writing my thesis on beef traceability, and I'm just interested in learning about your experience in the Integrity Beef Sustainability Pilot project coordinated by Noble and through McDonald's and about traceability in general. And like the email said, we are recording this interview and then we will prepare a typed transcript of the audio file and it will all remain confidential. So your name will not be used any way and it'll all be completely confidential. Does this sound OK?

**Interviewee fifteen** [00:01:08] Yes, as long as it's confidential and my name doesn't get out there. That's fine.

**Interviewer two** [00:01:13] Yes, ma'am. We'll make sure we'll use identifiers that don't personally identify you in any way. And then I wanted to share with our working definition of a traceable beef supply chain before we started with the questions. And traceable beef supply chain is one where cattle and its beef can be traced from the farms on which the cattle are raised throughout the beef supply chain until the point of consumption. While a single hamburger patty cannot be traced to the individual cattle from which it is made, we think that's a little bit too unrealistic. It can be traced to a collection of farms. We are concentrating on a voluntary system, not a mandatory system. So producers have the choice on whether they want to participate or not. And in this system, information such as farm production practices is passed down the supply chain, from producers to meat packers to retailers. And information such as carcass quality is passed up the supply chain from meat packers and retailers back to cattle producers. Such a traceable system might operate through open markets, through vertical integration, or something in between. Does that make sense? Do you have any questions about that?

**Interviewee fifteen** [00:02:23] No. It makes sense.

**Interviewer two** [00:02:25] OK. That's good. Well, let's get started with the questions then. The first few questions are about your experience in the Integrity Beef Sustainability Pilot project. And what did you like about the pilot project compared to the way you normally market your cattle?

Theme A Information Sharing

**Interviewee fifteen** [00:02:42] Well, what I liked about it was that we had a market for we're testing quality in our operations so we're investing in providing good care, good quality, producing quality cattle. And to give an outlet for that with the expectation of receiving a higher price. Better quality. Better product. That just makes sense.

**Interviewer two** [00:03:18] Yes, ma'am.

**Interviewee fifteen** [00:03:25] Then to know that where it was going. It went from us, to the packer, to the processor, to the end user. It didn't necessarily matter to me who the end user was. But then to get the reports back on the quality of what they saw as the quality of our animals.

**Interviewer two** [00:03:46] OK, what what information in particular did you look at that was most useful to you?

**Interviewee fifteen** [00:03:51] We looked at the carcass reports.

**Interviewer two** [00:03:55] OK. Why was the carcass reports most helpful to you?

**Interviewee fifteen** [00:04:01] Well, it's helpful in one way, but it's not helpful in another. So whether it was choice, it was select. It showed the grade. It showed all that. So if we sent 100 calves off, we were able to see how many of them graded at a certain level. How many of them were choice? How many of them were select? It kinda gave us a report card. As well, on the fact that we were producing quality quality product.

**Interviewer two** [00:04:36] That makes sense. It was a way to make sure that you were producing quality cattle and it was like a report card, like you said.

Theme B Issues with the Information

**Interviewee fifteen** [00:04:41] Right. So it's a report card coming back. What I don't like about it is that there is we get that and that's fine. But a lot of things happen to the cattle when they leave my loading chute to the end user after after processing. So to get those reports is great. However, that dependent on other people and their actions after the cattle leave us.

**Interviewer two** [00:05:16] Yes, ma'am. You don't really have a lot of control once the cattle go to the feedlots and the meat packers and everything like that. Do you think there is a way that cattle producers can get the carcass merits back with, a way that they can say it's all based on what the producers did and excluding what the packers and feedlots had on the impact of it?

**Interviewee fifteen** [00:05:40] That's a little above my pay grade. And you have to look at the entire process along the way. I don't know because they're not graded until they are processed.

**Interviewer two** [00:05:51] That makes sense.

**Interviewee fifteen** [00:05:51] They go to the processor and then they go to the end user and they're graded at that point, at processing, which is months down the road of when they left us.

**Interviewer two** [00:06:05] Yeah, I know. It's one of the things that it takes a while for cow-calf producers to get the information, especially the carcass merits back because cows are on a time schedule and everything. Was there anything else that you did not like about the pilot project compared to the way you normally market your cattle?

Theme B Issues with the Information

**Interviewee fifteen** [00:06:29] I think what I didn't like the most about it was the fact that it whether it was reality or whether it was perception. When we got these reports back from the feed yard and from the processor the call for action seemed to come down on the producer. And the producer was told you had too high of death loss at the feed yard. Too many. If you sent a hundred cow, you sent a hundred yearling and you had too many of them die in the feed yard. On the reports we got back, I sent those reports to my vet and said look at these. Cuz they're saying our cattle don't perform, they're dying too many in the feed yard. Some of them died ninety days after they were in the feed yard, that's not on me. There needs to be a some better form of grading the steps along the way. OK. If I was I was sending too many non-good cows to the feed yard that should be a reflection on me. But what happens to them at the feed yard is not a reflection on me. That's a reflection on the feed yard.

**Interviewer two** [00:08:02] Absolutely. Do you think one of the things that I do you think one of the ways that could help this was almost have a grading system when they get to the feed yards and then have other systems as they go from each step of the supply chain?

**Interviewee fifteen** [00:08:16] Yes, yes, yes.

**Interviewer two** [00:08:20] OK. And then how did you feel about sharing information about your operation and cattle with others in the pilot program?

Theme C Cow-Calf Producers Willingness to Share Information

**Interviewee fifteen** [00:08:30] I don't mind sharing information about the fact of how many we send and that kind of stuff. And I don't mind having the individual grades, if you will. Like I was getting my individual report. And then we would get an overall report. So it would tell me if I was in line with the average, better than average, worse than average. That kind of thing. I didn't mind that. I did mind the intrusive personal questions over our operation that didn't have anything to do with cattle production. Like how much our financial how much our overall operation ???did???? That has nothing to do with the program. If you want if you want me to provide information on how much I've spent on vaccines, how much I've spend on feed, and put that in there for a cost analysis, I can understand that. The personal detailed information I did not feel like was appropriate. In fact I didn't provide it.

**Interviewer two** [00:09:54] Yeah. I don't I don't blame you on that. Why do you think they were asking for that personal information? Because to me, that doesn't seem like it has a big role in traceability.

**Interviewee fifteen** [00:10:04] I think it was just a part of something that they came up with to analyze overall operation. And that that needs to be a separate consultation, if you will. If I want you to look at my overall ranching operation and provide advice on how I can do things better, that's a separate consultation and evaluation compared to the sustainability and traceability program.

**Interviewer two** [00:10:35] Yes, ma'am. That makes sense. And you already may have touched on this a little bit, but what information passed up the supply chain to you, did you find useful?

Theme F Issues with the Integrity Beef Sustainability Pilot Project

**Interviewee fifteen** [00:10:46] Well, and it's quite interesting because Noble wanted us to keep detailed information. What vaccines I put in the animal? When did I do it? The lot number, expiration date. I had to provide all of that detailed information to Noble. When the buyer of the stock for this program came, I asked him about providing all that information and his response was, we don't care. So, you know, I don't know where the disconnect was in there. I don't know if that was a requirement of Noble to be able to say all that all the cattle in this program had to adhere to these guidelines. But nowhere did it go to the packer. When those cattle left us that I know of maybe it was on Noble's side. But when those cattle left us they went on trucks and went up to the feed yard. And, you know, they didn't act even remotely interested in what we had done or hadn't done, it was all from us to Noble. So whether Noble provided that information and had to attest to the fact that all this stuff was done, I don't know the answer to that.

**Interviewer two** [00:12:23] Yes, ma'am. You think the buyer of the cattle would definitely care that you went through all these protocols and requirements and data keeping to get the best price for your cattle. So how do you how do you think you solve that disconnect?



**Interviewee fifteen** [00:12:39] Well, I I I know of somebody that isn't in this program, but sells cattle direct to the feedlot and when that feed yard comes and picks up his cattle, those records are given to the driver and they're turned over to the feed yard where ???he sent them??? the buyer, if you will. So when the truck pulls up they load the cattle, those records go with the driver, go to the feed yard, and are turned in there. So, you know, to me, if you're going if you're going to say we need to do this, then if I was sitting in the feed yard side, I would want those records to show these cattle on these trucks got this stuff signed by the producer saying I gave these cattle this stuff. Otherwise, they went up there and they don't know if they had anything.

**Interviewer two** [00:13:52] Yeah, I mean, it seems like the feedlot would want that information so they can sell their cattle for a premium because they did have these vaccinations and these weaning protocols and all these other protocols as well.

Theme F Issues with the Integrity Beef Sustainability Pilot Project and Theme B Issues with the Information

**Interviewee fifteen** [00:14:05] Right. If you're going to put together a project that says we want premium animal, we want animals that are, well, taking care of their vaccinated, that have shots that are well fed, well managed, all this kind of stuff. And we will pay more to get that quality. Then I would want ???backup??? to prove that I'm getting that quality. Otherwise then why would I not just go and buy regular sale barn cattle? That you don't know if these cattle going up there with no record, the feed yard is like did they get a shot or did they not.

**Interviewer two** [00:14:54] Yeah. Then that makes all the sense in the world, and the feedlots should definitely have those records if they were interested in that.

Theme E Will Cow-Calf Producers Continue to Participate in the Integrity Beef Sustainability Pilot Project? and Theme K Attributes of an Effective Large-Scale Traceability Program

**Interviewee fifteen** [00:15:01] Right. So I'm sitting here saying I will do this. I will follow these guidelines of this project. I will follow these guidelines of the project. I will give them these shots. I will treat them this way. I will do all of these steps. And in return, I want to be compensated for all of that because I'm giving I am providing that information to you and I'm doing that work for you. So, you know and then the feed yard should be able to say, yes, I bought these cattle that have been treated this way. Now I'm responsible for here and onto the next steps. Does that make sense? Am I making sense?

**Interviewer two** [00:15:47] Yes, ma'am. You're making you're making a lot of sense. It's basically you're saying the buyers didn't really ask for the records when you sold them and the feedlots don't really have the records. So how are they gonna know what traceability protocols you're following and how are you going to get a receive premium for that? Why would you go through all the hard work if you're not going to receive a premium for that?

**Interviewee fifteen** [00:16:11] Correct.

**Interviewer two** [00:16:13] That makes sense. And what information did you not find useful?

**Interviewee fifteen** [00:16:20] That I received back.

**Interviewer two** [00:16:20] Yes, ma'am.

Theme B Issues with the Information

**Interviewee fifteen** [00:16:26] Really I don't think I didn't receive anything that I did not find useful. I think my biggest deal was we didn't know I didn't know how these were progressing until months down the road when they're processed. So we're in the dark. We sell them and they leave out. And then we don't hear a word from it until months and months down the road. So, you know, and that may be the nature of the business. But I think what we got was helpful. So I guess if I did. I don't know if there's a way to provide feedback at the next step. We got no feedback when they were at feed yard, we didn't get feedback until after everything was processed and the meat was already dead and gone.

**Interviewer two** [00:17:39] How how do you think you would get information from the feed yards and get information back quicker to the producers so they can actually make quicker and more tangible decisions?

**Interviewee fifteen** [00:17:50] You know, I don't I really don't I don't know. And I don't know if part of the issue is. I don't I don't know what happened. And I guess I really don't necessarily care after they left me unless they're going to be. Here's my big issue I guess. They try and tell me a way months down the line oh your cattle did not perform all that well. But from the time they left me, I've had zero contact and zero information until the very end. But I don't know how they can relate back to me your cattle are doing well at the feed yard or not doing well. And I don't know how and again, this is not part of my deal. When they get to the feed yards are these highly taking care of, premium cattle. Did they come off the truck and go right in the pens with everything else? And I don't know the answer to all that, you know, and that's there deal of course, not mine. I just I just want to be held accountable and graded on what I have control of, not necessarily what happens after that. OK, if my cattle arrived at the feed yard, it would be nice to have I guess it is something it will be nice for the feed yard to report back and say we received your cattle on this day. And here were here were some issues or, you know, one of them came in lame. Well, they weren't lame when they left me. Maybe they got lame on the truck, see what I'm saying, so that you know they left me in this condition. They arrived at the feed yard in this condition. Now part of that may lie on the trucker. You know, everybody has to be accounted for their own stuff along the way.

**Interviewer two** [00:20:01] Yes, ma'am. There's a lot of moving parts in the beef supply chain and would be nice if there was a way for everyone to be held accountable and learn that it was truly them that caused the issues or the successes or if it was someone else down the supply chain.

**Interviewee fifteen** [00:20:17] Right. I mean, like if we sold them, we sold calves they went to a feed yard in Kansas. Kansas gets hit by a blizzard and a lot of my calves happened to die. Whenever I get the report back, they tell me my death loss is too high. Well, that blizzard isn't my fault. You see what I'm saying.

**Interviewer two** [00:20:39] No, it's not your fault at all. I do see what you're saying. Yes, ma'am. And then what steps you were taken to make you feel comfortable sharing information about your operation?

Theme C Cow-Calf Producers Willingness to Share Information

**Interviewee fifteen** [00:20:54] I think I think the fact that it kinda like this. It's anonymous to other users or other participants, if you will. I don't necessarily want I'm not going to disclose how much I got from my cattle, and I don't think anybody else would. I I'm not asking for private information from other ones. I think kinda like this I'm giving you this information for you to grade us or compare us to all participants. And give everybody a report card on how you did as

compared to the average but you don't put up there here's John, here's Susie, here's Fred, here's Mary and publish all of that.

**Interviewer two** [00:21:51] Yes, ma'am, that that makes a lot of sense. And then if the pilot project was made permanent, would you continue to participate in it?

Theme E Will Cow-Calf Producers Continue to Participate in the Integrity Beef Sustainability Pilot Project?

**Interviewee fifteen** [00:22:02] If there is a premium that get received for participating, yes I would consider it. But whenever they did it, we got compensated or a premium and all the records and doing all this and certifying that we did all this extra care. You know, when they did when they took that away and said, no, we're not going to give a premium for this anymore, but go ahead and keep doing all this extra stuff and you'll get exactly what you get taking them down the road to the sale barn, you know. No thank you.

**Interviewer two** [00:22:43] Yeah. I don't I don't blame you on that. Why why did they take the premium away?

**Interviewee fifteen** [00:22:48] That I don't know. That would be a Noble question.

**Interviewer two** [00:22:53] OK, OK.

**Interviewee fifteen** [00:22:55] The premium was for two years and two years only to see how it went. And then that was kinda the end of that. I don't know if it was a funding issue. I don't know.

**Interviewer two** [00:23:11] OK, that makes sense. And then you've already touched on this a little bit, but if you can think of anything else that be great as well. What aspects of the pilot program would you recommend changing?

Theme K Attributes of an Effective Large-Scale Traceability Program

**Interviewee fifteen** [00:23:29] I think the accountability at the end and accountability at each step throughout the way. And I think maybe more faith in the actual process. OK. You have to do this at the producer level and you're committing to do this at the producer level. It's going to go to the feed yard. And the feed yard commits to these actions at their level. And it goes from there to the processor and they commit to doing it at a certain level. So that we realize that we are a part of this overall operation to create high quality beef for the ultimate consumer. You know, I can do all I do. I put in all this effort and I put time and effort and money and vaccines and feed. I buy high quality feed and I do all this and it gets to the feed yard and the feed yard feeds them junk and send them all up the line. And the processor doesn't process them right and it ends up being not quality. You know, if I'm going to be a participant, I expect high quality throughout the whole process so that it starts with me, but I'm just one step along the way. I don't want to be saying, I'm in this project and I'm putting all this in for it not to have the end result.

**Interviewer two** [00:25:16] Yes, ma'am. That makes sense. Do you think having like a contract with certain feedlots and packers that only do like traceable beef, would that help the situation to make it more quality cattle?

Theme K Attributes of an Effective Large-Scale Traceability Program, Theme Q Risk of the Cattle Industry Turning into the Swine and Broiler Industry, and Theme U Coronavirus Effects on a Traceability Program

**Interviewee fifteen** [00:25:32] I think I guess if I go two different ways. I worry about being too vertical because when things happen, like this covid stuff hit and certain it was streamlined that when certain packers shut down everything piled at the farm and they ended up euthanizing a whole lot of good animals. So I hate I don't want to be so streamlined that there's no option. But at the same time, yes, I think there needs to be if we're going to participate in this it's gotta be a streamlined to where these types of cattle are funneled through certain operation and certain ways of doing things so that you end up with that that quality product. You know, if we're going to produce, take all this, and do it at our level. And then it goes all the way through to become Capital Grille steak then Capital Grille, is confident of everybody's steps along the way. But I don't want to do all this to get it diverted somewhere else and end up Golden Corral. I don't mean that negatory, but you know what I mean.

**Interviewer two** [00:27:01] Yeah, I understand that. And that's totally totally acceptable to think that way and believe that way.

#### Theme K Attributes of an Effective Large-Scale Traceability Program

**Interviewee fifteen** [00:27:10] And so if I look at it along the way, if I was on Capital Grille, if I'm going to sell a 70 dollar steak, then the people that are getting that 70 dollar steak are expecting that high quality all the way down the line. And that quality comes at a price.

**Interviewer two** [00:27:31] Yes, ma'am.

**Interviewee fifteen** [00:27:31] It may start with me but that's where the compensation it's got to come all the way down the line.

**Interviewer two** [00:27:39] Yes, ma'am. Quality beef needs quality throughout the entire beef supply chain.

**Interviewee fifteen** [00:27:45] Right.

**Interviewer two** [00:27:47] Do you believe the cattle industry will begin adopting traceable beef supply chains on a large scale level?

#### Theme O Do Consumers Care About Traceability?

**Interviewee fifteen** [00:27:58] I don't know about large scale. I think there will be a part of it that will because from what I've understood in seminars and classes that I've gone to the consumer says I want my steak, I want my beef. I just want to make sure where it comes from, how it's handled, and then it's a good safe product. And that's a big part of the consumers out there. There are other consumers that don't care as long as they go where they go and they buy pounds of hamburgers, and make their hamburgers and they're fine. So I think I think a lot is consumer driven and that there are people who are willing to pay the premium to get the premium product. You know, USA grown, USA feedlot, packed, everything here. And to know where it came from. This is Texas beef, this beef came from Texas. It came from New Mexico. It came from Colorado. That's a big part of it. I don't know whether that's going to be the majority, the super majority of the consumers in the country or whether it is going to be part of the consumers and a big part is going to be, I just want a hamburger at the store. As long as it's at the store I'm getting it.

**Interviewer two** [00:29:39] Yes, ma'am. There's definitely those two types of consumers. And you're basically saying that traceability is gonna be based off what the consumer and some

consumers will care about traceability and some will not care about it at all. Do you know which one will be the majority or do you not know?

Theme O Do Consumers Care About Traceability? and Theme K Attributes of an Effective Large-Scale Traceability Program

**Interviewee fifteen** [00:30:00] I I don't know. I don't know. And at some point the price will factor a lot of that, you know, there's not a whole there's people that will pay that sixty dollar steak at Capital Grille or seventy dollar steak, but they're not going to do that every day. They're going to go down the Kroger or wherever and get their hamburger meat. I think everybody across the country wants the supply chain and the beef supply to be safe regardless of where they do it. But I don't think that a lot of consumers will care that Texas grown with everything done that we do it. As long as it's safe being in the Kroger. So, you know, I think there is a path and a niche for both for the ones that want that high end premium product. And then there is the other. And I think they both obviously it's just in the in the program to produce that high end premium product there has to be compensation that we're taking on all that extra responsibility, all that extra work, all that extra documentation.

**Interviewer two** [00:31:42] Yes ma'am. That makes sense. Who do you think that compensation would come from?

Theme I Cow-Calf Producers Concerns about a Traceability Program

**Interviewee fifteen** [00:31:48] Well, I think it comes all the way down the line. You know, Capital Grille not going to buy steak that they're going to sell for seventy dollars from a processor that is not producing that high of quality. They're going to pay that processor higher for their steak than the other guys down the street that's just trying to put whatever steak he can on there at the cheapest price. That processor that wants that high quality from the feed yard is going to pay the feed yard more to give them what they need to sell at Capital Grille. Therefore, the feed yard should pay the producer for the high quality. So it comes all the way down the chain. But what I'm afraid happening is everybody for the producer we will just pay them whatever the going rate is and then we will jack it up all the way up the chain. I don't I don't know where the breakdown is, but all of that premium has to flow down. Or why are the producers going to take the time and the effort to produce the first step?

**Interviewer two** [00:33:09] Yes, ma'am. That makes all the sense in the world. Why put in the extra time and effort if not going to get a premium for that. And then I know want you to think about a hypothetical large scale beef traceability system and the beef industry does adopt a traceable beef supply chain. And if the beef industry adopted a traceable supply chain on large scale that was viewed favorably by cow-calf producers like yourself what would it look like?

Theme S Concerns About Importing Foreign Beef

**Interviewee fifteen** [00:33:36] Well, that's such an overarching issue that I'm not sure how you do it unless unless you have electronic ear tags in every animal all the way through the process, including imports, and therein lies the problem, a huge problem for me. If you're going to import beef from other countries, you have no idea what those countries are doing in how they handle their cattle. So you can put all the requirements you want to on American beef. But if you're going to import beef that is not that doesn't meet those requirements. Then to me the effort is is totally to be to be total beef supply chain traceability. That that's a huge problem.

**Interviewer two** [00:34:45] Yes, ma'am. That makes all the sense in the world. How how do you think you address that issue of making sure that imported beef follow traceability requirements?

**Interviewee fifteen** [00:34:55] Well, that would be government government, I would guess. But, you know, I guess the only way you could it is if you're going to import the beef it has to be done within these standards. Now how you enforce that is another big issue.

**Interviewer two** [00:35:21] Yes, ma'am. I can definitely see enforcement being a major issue in that.

#### Theme S Concerns About Importing Foreign Beef and Theme M Role of the USDA

**Interviewee fifteen** [00:35:26] I mean, we have the USDA. They don't enforce a whole lot, but we actually do have the USDA and these ???institutions??? they can pass the laws and do whatever they want to for American beef producers, but they can't pass any laws that hit Brazil or wherever and make sure that they comply unless their government does it. Unless you stop the beef from coming in unless they do that, unless they meet certain requirements and that is a high level major issue I imagine.

**Interviewer two** [00:36:05] Yes, ma'am. And then now with the beef industry adopted a traceable supply chain on a large scale that was not viewed favorably by our cow-calf producers like yourself. What would it look like?

**Interviewee fifteen** [00:36:19] Well, I think it I think right now it is a kind of a hybrid. And I think that that's fine because you have producers that are just, you know, they raised a few cattle here and there take them to the sale barn. They go on and to the packers and what have you. You know, if you the problem to me is and I do not how you do the problem to me, is that if there is a breakdown somewhere along the way and, you know, like you had those E.coli breakdown, how do you know where it came from? And I don't. Did it come from the processor did the processor not do it correctly? Did it comes from the feed yard? Did it come from the actual farm? Until you get accountability for everybody along the way. That's going to be very hard to do.

**Interviewer two** [00:37:31] Yes ma'am, that that makes sense. And then now I want to ask you some more specific questions about a traceable beef supply chain on a large scale. What information about you and your operation do you feel comfortable sharing with others in a beef traceability system?

#### Theme G Are Cow-Calf Producers Open to a Large-Scale Traceability Program?

**Interviewee fifteen** [00:37:47] Well, I think the I think again what we did on the Noble as the pilot. You know, we had to certify that we had done certain vaccines, feed that kind of stuff. I think that that could be that could be fine. But again, I don't think on a large scale, if you're talking about doing that on a large scale with all the beef produced in the country. I don't think you're gonna get there because not everyone is going to keep those kind of records. And they may not they may not do it. You know, it's not required that you give vaccines like we give vaccines on this program. And the calves can still become part of the food supply. So, you know, trying to trace every single calf in this country from birth to the table is that that's way above my pay grade.

**Interviewer two** [00:39:15] Yes yes, ma'am. I understand that. And do you believe a traceability system is necessary to manage disease outbreaks like mad cow disease or foot and mouth disease?

#### Theme N Managing Food Disease Outbreaks

**Interviewee fifteen** [00:39:34] To a certain extent I guess to be able to trace from where it's but to me that's still hard because of where the animal are going all the way through the different processes. And some of these people having responsibility for them at certain times. OK. So I don't want you to come to me and say, oh, your calves got mad cow disease when it didn't have anything to do with me and my operation.

**Interviewer two** [00:40:11] That makes all the sense, all the sense in the world. And then if the beef industry adopted a traceability system, do you think it should involve the USDA?

Theme O Do Consumers Care About Traceability?

**Interviewee fifteen** [00:40:24] There has to be some oversight somewhere because otherwise, how do you know that every all the protocols are being adhered to. And and again, a lot of this is going to be in my opinion, consumer driven because if you're going to increase the price to the ultimate consumer who's wanting to put their hamburgers on the grill, who doesn't care that it come from Texas or it came from New Mexico or it doesn't care where it came from. But if you implemented all this traceability, it's going to come at a cost, and then put in all the oversight over it someone is going to have to pay for that. And at what point does the consumer say, I'm not paying that much for hamburger meat. And then have you jeopardized the beef industry because of all the requirements and regulation and costs involved that didn't necessarily gain the consumer what they needed.

**Interviewer two** [00:41:49] Yes, ma'am. That makes sense. And you talked a little bit about oversight. Do you think it should be the USDA? Do you think it should be a third party or who?

Theme M Role of the USDA

**Interviewee fifteen** [00:42:03] The USDA is unfortunately like most government operations. They are like the most inefficient at doing a lot of things. But they also are the ones that can do it nationally, you know, if you're going to have some private company doing it there's going to have to be a profit margin with that. So if you have the government doing it that just adding it to the USDA's oversight and their responsibilities makes more sense. However, like I said, they're not the most efficient at actually conducting programs.

**Interviewer two** [00:42:58] Yes, ma'am. It's been proven that private companies are a lot more efficient in handling tasks than any government organization, but the government organizations like USDA do have more of a broad breach so that they can do it on a national level.

**Interviewee fifteen** [00:43:12] Right.

**Interviewer two** [00:43:14] And then if the beef industry adopted a traceability system such that cattle producers felt compelled to participate in order to find buyers. Do you think that might alter the market powers of Cattle producers?

Theme K Attributes of an Effective Large-Scale Traceability Program

**Interviewee fifteen** [00:43:33] It depends on again, it goes back to receiving the compensation for what you're doing for it. So if if you put together a program that says that to be in the traceability program. We certify to this and the buyers' recognize to pay a premium for that and adhere to their part and are paid a premium. And it goes on down the line then yes that makes more sense. If you're just want to say you're going to have to do all this extra but we're not going to give you any extra money, you're not gonna get a premium. You're not going to be compensated for it. You just gonna get what you get down at the sale barn. Then no most

producers are gonna say no. Why should I go to all this extra and be accountable and responsible for all this extra costs and responsibility. And get nothing more than I can go down to the sale barn and sell them with none of that.

**Interviewer two** [00:44:50] Yeah, that makes that makes all the sense in the world. Are you concerned at all that a traceability system might lead to the cattle industry becoming more like the swine and broiler industry where it's almost like contract farming?

Theme Q Risk of the Cattle Industry Turning into the Swine and Broiler Industry and Theme U Coronavirus Effects on a Traceability Program

**Interviewee fifteen** [00:45:03] A possibility and I think that's the bigger fear and that this crazy epidemic pandemic expose that as a huge weakness. I mean they euthanized thousands and thousands and thousands of hogs because they were required to go to certain processors and they're not there. It was such a fine tuned machine that they had operating, you know, the pigs come on, there's a three day window to get them to the processor, the processor took them and off they went. When the processor shut down it backed everything on the farm and you were killing you were killing a perfectly good animal. That is a travesty that should never, ever have been allowed to happen. You know, I think a part of it should be that there has to be enough capacity somewhere so that doesn't that does not occur. There's no excuse for euthanizing a perfectly good animal because of the system set up in this country that was just a travesty, same thing as chickens.

**Interviewer two** [00:46:23] Yeah, it was yeah, definitely was was a tragedy. And it was kind of even more frustrating on the consumer end because I'm a consumer and we could barely go to the grocery store and find meat and then here we have producers euthanizing thousands of healthy animals.

**Interviewee fifteen** [00:46:40] Yes. And you couldn't get them anywhere else so if you were contracted to go to XYZ processor, you couldn't divert and go to HB processor. You know, there was it was just the setup of it's, they were too vertical. And it fell on then you the end user, the consumer, like you, who couldn't get food, couldn't buy bacon, couldn't ham, couldn't buy sausage, couldn't get food at the grocery store. And you had producers that were euthanizing their crop and couldn't get paid on it. That is a huge issue that needs to be addressed nationwide. So as a part of this traceability, part of it should be we have to set up whatever system we set up if we go this way has got to be so it's not the chickens and not the hogs.

**Interviewer two** [00:47:41] How how do you think you set up that traceability system so it's not that way?

**Interviewee fifteen** [00:47:48] Again, above my pay grade, but there has to be options available and a pandemic is is, you know, that that's something that just created such havoc. But the lesson should be looked at from ???meat??? coming from pork and chicken and say, OK, this is what happened. So how do we do this so that it doesn't happen again? If XYZ processor goes down because of another outbreak, how do we divert that food supply to other places? Do you need smaller more regional processors? Do you need to have Tyson not have one big one super gigantic plant somewhere but that have plants, other places around the country? I don't I don't know. But you can't just shut the door and then tell the farmers oh go out there and shoot your hogs. Meanwhile, the people of the country can't get food.

**Interviewer two** [00:49:05] Yes, ma'am. It definitely was a difficult situation for pretty much everybody involved. And we certainly don't want that to happen ever again.



**Interviewee fifteen** [00:49:16] Now then you see it happen with pigs and chickens. So how how the consultants and the people that are a whole lot smarter than I am need to see how you fix that. So how does the beef not get to that point?

**Interviewer two** [00:49:34] Yes, ma'am, that makes that makes all the sense in the world, and we certainly don't want to get to that point ever in the beef industry. And then that completes all the questions we had prepared. Do you have any comments you would like to add or suggest any questions we didn't ask that you think we should have?

**Interviewee fifteen** [00:49:53] No, I think that that was pretty comprehensive. I mean, I don't think that their ranchers are. I think good quality ranchers are fine with having some of this and participating in these kinds of things. They just want to be compensated for their effort.

**Interviewer two** [00:50:14] Yes, ma'am. That's I don't I don't blame ranchers for wanting to be compensated on all the extra hard work they do. Thank you. Thank you again for participating in speaking speaking of compensation, we are going to we would like your mailing address so we can send you one hundred dollars in cash for participating so you don't even have to write it off on your taxes or anything.

VITA

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