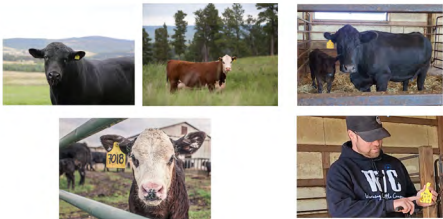
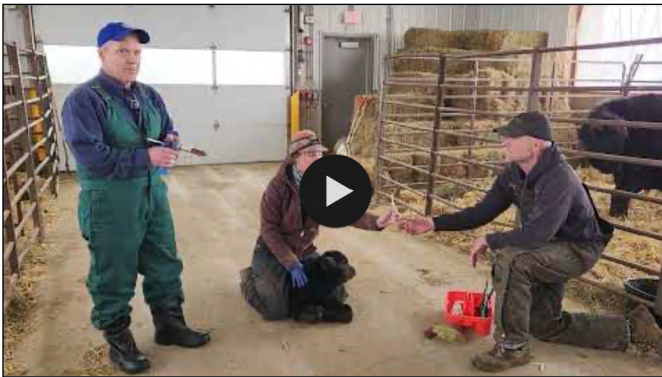
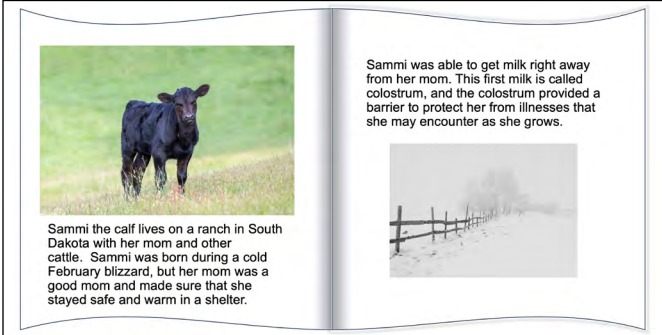


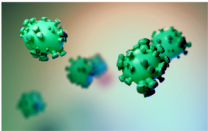
Slide	Notes
 SOUTH DAKOTA STATE UNIVERSITY EXTENSION  Adopt-A-Cow: Beef Lesson 3 Calf Health SDSU Extension is an equal opportunity provider and employer in accordance with the nondiscrimination policies of South Dakota State University, the South Dakota Board of Regents and the United States Department of Agriculture. Learn more at sdstate.edu/about © 2020, South Dakota Board of Regents 	
Lesson 2 Review    SOUTH DAKOTA STATE UNIVERSITY EXTENSION 2	<i>*This slide contains animations during slide show mode. These animations/mouse clicks are noted by a number in italicized parenthesis.*</i> What do you recall about what we learned during our last lesson? (1) In lesson 2, we learned about some physical traits that calves inherit from their parents. (2) We also learned that cattle are sorted into breeds based on these different traits (3) We met our cow for the year, an Angus-Simental cross cow with the number 914 and her bull calf (4) We also learned about ear tags and the importance they play in identifying individual animals. These tags provide cattle and identification (like your name) and allow ranchers to track a variety of information about their animal. In today's lesson we are going to learn more about how ranchers care for their animals.
Animal Health and Safety   SOUTH DAKOTA STATE UNIVERSITY EXTENSION 3	It is the duty of a Rancher to make sure that all their cattle remain safe and healthy. If you think back to Lesson 1 – what were some of the ways that ranchers cared for their cattle? <i>Moved them to areas that had lots of grass and water.</i> During the long hard winters, many cattle died. What did ranchers change to ensure cattle could survive long cold winters? <i>Began drying and storing grass (hay) to get through long winters.</i> The way ranchers care for their cattle isn't all that different from how families, schools, and communities work to keep you safe and healthy. What are some ways that your caregivers keep you safe and healthy? <i>Food, water, shelter, clothing, seatbelts, doctor visits ...</i>

Slide	Notes
Healthy Animals  	Cattle, like all animals, require the necessities of food, water and shelter to remain healthy.
Animal Safety  	<i>*This slide contains animations during slide show mode. These animations/mouse clicks are noted by a number in italicized parenthesis.*</i> One way that ranchers keep their cattle safe is by putting up fences. These fences protect cattle by keeping them away from potentially dangerous situations like roads. They also can sometimes protect them from dangerous wildlife. Fences also help protect their herds from mixing with those of neighbors. This might not seem like a big deal but having your cattle mix with someone else's cattle can cause all types of challenges including the spread of illnesses or animals getting hurt. (1) Cattle in SD also need protection from the weather. This protection may come in the form of a barn; however, cattle can grow thick winter coats and barns are not necessary to ensure their comfort in the winter. Shelter for cattle may look simply like a grove of trees. These trees protect cattle from bitter winds during the winter, but also the intense summer sun.
Healthy Animals  	<i>*This slide contains animations during slide show mode. These animations/mouse clicks are noted by a number in italicized parenthesis.*</i> In addition to keeping their animals safe, ranchers do their best to keep them healthy. Just like our parent's (caregivers) do their best to keep us healthy. But just like us, cattle are exposed to bacteria and viruses in their environments and can get sick. Cows can get things like runny noses, pink eye, and hurt legs just like we can. (1) Like us, sometimes they need medicines to treat bacterial infections. (2) Cattle also receive vaccinations to reduce their risk of contracting certain illnesses. Many of you may also receive vaccinations when you visit the doctor. (3) When cattle are very sick or even hurt, Ranchers will ask for help caring for their animals. Just like your parents may take you to the doctor when you are sick, Ranchers take their animals to the veterinarian.

Slide	Notes
Animal Tracking  SOUTH DAKOTA STATE UNIVERSITY EXTENSION 7	<i>*This slide contains animations during slide show mode. These animations/mouse clicks are noted by a number in italicized parenthesis.*</i> Part of ensuring health and safety of animals is having records about each animal. Keeping track of 1 or 2 animals can be fairly easy. However, many ranchers have hundreds of cattle. (1) Sometimes those herds of cattle might have distinctive markings that can be used to easily identify them (2) but other times they may all look alike. Ranchers need to know which calves belong with which cows. They need to know who has received what medications and when). Some ranchers even track their calves birth weights and birth dates. How do you think that ranchers might do this? - How do you keep track of your pets? <i>Collars</i> How do doctors keep track of all of their patients? <i>Names, Date of Birth, Patient Numbers</i> We can easily use names to identify our pets even without tags, but if we had hundreds of them and they all looked alike, would it be easy to tell them apart? Is there something we can do to cattle to provide identification? Think back to our calf introduction video. What does Werning Cattle Co utilize to identify their individual animals? <i>Ear tags</i>
Ear Tags  SOUTH DAKOTA STATE UNIVERSITY EXTENSION 8	Keeping track of animals is very important in making sure they stay healthy. Just like your name and birthdate are used to identify you when you go to the doctor, ranchers need to identify their individual animals to make sure they can easily track their health among other things.
	Let's revisit how Werning Cattle Company, where our calf is, marks their ear tags.

Slide	Notes
	Let's revisit how Vedvei, where our calf is, marks their ear tags.
Ear Tags  Name Number Symbols Birthdate Mom's Name or Number Dad's Name or Number SOUTH DAKOTA STATE UNIVERSITY EXTENSION	We are going to create our own ear tags today. Encourage students to design their own ear tag design. Youth can work in their ranch groups so that they can create common themes across all of their ear tags. This may be the same symbol, or simply having the information in the same order or format. They could identify their imaginary herd by the following: - Names - Numbers - Symbols
	Ranchers often employ the assistance of large animal veterinarians to assist them in making sure that their animals remain in good health. Let's meet with one to learn more about what they do. What were some of the things that Dr. Daly mention that the baby calf needed to have a better chance of survival? <i>Clean Environment</i> Vaccinations – What is this? <i>The medical solution used to provide active immunity to specific infections or diseases</i> Not mentioned, but also an important piece of healthy calves is Colostrum. Colostrum – What is this? <i>The nutrient rich first milk that animals produce to help their newborns thrive by providing them with protections against bacteria and viruses they may be exposed to.</i>
 Sammi the calf lives on a ranch in South Dakota with her mom and other cattle. Sammi was born during a cold February blizzard, but her mom was a good mom and made sure that she stayed safe and warm in a shelter. Sammi was able to get milk right away from her mom. This first milk is called colostrum, and the colostrum provided a barrier to protect her from illnesses that she may encounter as she grows. SOUTH DAKOTA STATE UNIVERSITY EXTENSION	<i>Introduce the first paper/felt calf by putting it on the board.</i> Sammi the calf lives on a ranch in South Dakota with her mom and other cattle. Sammi was born during a cold February blizzard, but her mom was a good mom and made sure that she stayed safe and warm in a shelter. Sammi was able to get milk right away from her mom. This first milk is called colostrum, and the colostrum provided a barrier to protect her from illnesses that she may encounter as she grows.

Slide	Notes
 During the first few months of Sammi's life, she made friends with a racoon that lived near her pasture. One day the racoon became sick with pneumonia. Sammi did not become sick even though she and the racoon had played a game of tag the day before.  SOUTH DAKOTA STATE UNIVERSITY EXTENSION	During the first few months of Sammi's life, she made friends with a Racoon that lived in the trees near her pasture. One day the racoon became sick with pneumonia. Sammi did not become sick even though her and the racoon had played a game of tag the day before. <i>Have youth try to put 1 'germ' on Sammi.</i> <i>The 'germ' does not stick because Sammi received the colostrum in proper time to build up her immune system and prevent her from getting sick when exposed to the germs.</i>
 Meet Charlie, Sammi's friend. He lives on a neighboring ranch in South Dakota with his mom and other cattle. Charlie was born during a cold February blizzard just like Sammi, but he wasn't able to get milk from his mom right away.  His rancher gave him a bottle of colostrum as soon as he could, but only time would tell if the colostrum got to Charlie in time. SOUTH DAKOTA STATE UNIVERSITY EXTENSION	<i>Introduce the second calf by putting it on the board.</i> Meet Charlie, Sammi's friend. He lives on a neighboring ranch in South Dakota with his mom and other cattle. Charlie was born during a cold February blizzard just like Sammi, but he wasn't able to get milk from his mom right away. His rancher gave him a bottle of colostrum as soon as he could, but only time would tell if the colostrum got to Charlie in time.
 As winter turned into spring the wet weather and changing temperatures were hard on poor Charlie's system. He got sick fairly often and was exposed to multiple illnesses.  These germs stick to Charlie because his immune system was not built up due to him not receiving colostrum in a timely manner. Calves have to receive colostrum within the first 24 hours, ideally within the first 4-6 hours following birth to have the strongest immune system. SOUTH DAKOTA STATE UNIVERSITY EXTENSION	As winter turned into spring the wet weather and changing temperatures were hard on poor Charlie's system. He got sick fairly often and was exposed to multiple illnesses. <i>Have youth put 4 'germs' on the Charlie</i> These germs stick to Charlie because his immune system was not built up due to him not receiving colostrum in a timely manner. Calves have to receive colostrum within the first 24 hours, ideally within the first 4-6 hours following birth to have the strongest immune system.
 Charlie got pneumonia and his rancher had to treat him with an antibiotic to help his body fight the infection and make him feel better.  Antibiotics are needed to help our animals overcome sicknesses. Without antibiotics, Charlie's pneumonia would have continued to get worse. This antibiotic was used properly to allow Charlie to overcome his sickness. Antibiotics are not given to animals who are not sick. SOUTH DAKOTA STATE UNIVERSITY EXTENSION	Charlie got pneumonia and his rancher had to treat him with an antibiotic to help his body fight the infection and make him feel better. <i>Have youth take 1 'germ' off Charlie</i> Antibiotics are needed to help our animals overcome sicknesses. Without antibiotics, Charlie's pneumonia would have continued to get worse. This antibiotic was used properly to allow Charlie to overcome his sickness. Antibiotics are not given to animals who are not sick.

Slide	Notes
 At six months old, Sammi and her friends were ready to move to a new pasture away from their moms. Their rancher knew that this move could cause them to get sick and so before the move he provided them with vaccinations to boost their immunity.  SOUTH DAKOTA STATE UNIVERSITY EXTENSION	At six months old, Sammi and her friends were ready to move to a new pasture away from their moms. Their rancher knew that this move could cause them to get sick and so before the move he provided them with vaccinations to boost their immunity.
 When spring came and it was time to go to pasture, Charlie was healthy again. However, he was much smaller than many of his friends. While out to pasture with his mom and friends, Charlie made friends with a pheasant and was exposed to his friend's germs. Soon after they had met, Charlie became ill again.  SOUTH DAKOTA STATE UNIVERSITY EXTENSION	When spring came and it was time to go to pasture, Charlie was healthy again. However, he was much smaller than many of his friends. While out to pasture with his mom and friends, Charlie made friends with a pheasant and was exposed to his friend's germs. Soon after they had met, Charlie became ill again. <i>Have students add a 'germ' to Charlie</i> Charlie was not vaccinated before going out to pasture. This left him vulnerable to many different germs and allowed him to become sick again.
 Out on pasture, Sammi spent lots of time with her friends from the same ranch. One day, a calf named Herald from a neighboring ranch got through the fence and into Sammi's pasture. She was excited to have a new friend and played with him all afternoon. Herald is from a new herd and brought over some new germs over to Sammi's pasture.  Since Sammi was vaccinated before coming to this new pasture, these new germs did not make her sick. SOUTH DAKOTA STATE UNIVERSITY EXTENSION	Out on pasture, Sammi spent lots of time with her friends from the same ranch. One day, a calf named Herald from a neighboring ranch got through the fence and into Sammi's pasture. She was excited to have a new friend and played with him all afternoon. Herald is from a new herd and brought over some new germs over to Sammi's pasture. <i>Have youth try to put 4 'germs' on the Sammi</i> Since Sammi was vaccinated before coming to this new pasture, these new germs did not make her sick.
 Let's take a look at the two calves. They started their life in the same conditions; however, they have had very different health journeys. • What conclusions can we make about Sammi's health compared to Charlie's health? • What different things helped protect the health of these calves?  Sammi's and Charlie's ranchers will continue to monitor their health as they grow. Just like our adopted calf, these calves will grow quickly and their ranchers will continue to care for them as their needs change. In our next lesson we will talk about the unique way that these calves digest their food. SOUTH DAKOTA STATE UNIVERSITY EXTENSION	Let's take a look at the two calves. They started their life in the same conditions; however, they have had very different health journeys. What conclusions can we make about Sammi's health compared to Charlie's health? What different things helped protect the health of these calves? <i>Colostrum, Vaccinations, Antibiotics</i> Sammi's and Charlie's ranchers will continue to monitor their health as they grow. Just like our adopted calf, these calves will grow quickly and their ranchers will continue to care for them as their needs change. In our next lesson we will talk about the unique way that these calves digest their food.

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