



# WHY AND HOW IS DNA IMPORTANT TO THE BRAUNVIEH ASSOCIATION

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## Why and How is DNA Important to the Braunvieh Association

Today DNA is a hot topic in the cattle industry. I feel some producers shy away and hide from DNA because it pertains to things that can not be seen except through a microscope. Today I want to shine a light on something that can move the Braunvieh Association into a more competitive future.

First let us look at what DNA is, to understand why this is important to the Association. DNA is the blueprint that shows us what a human or an animal is made of, just like a blueprint of a house shows how many doors and windows and where they go. That blueprint is stored in the animal's 60 chromosomes, which is 14 more chromosomes than a human has. An animal's blueprint tells producers and the Association about the different traits in each animal and helps us to breed better genetics in our herd's.

For something so important to a breed, DNA is rather easy to obtain and not that expensive. One of the simplest ways to collecting DNA is pulling a section of tail hair on an animal, making sure you get the root balls. Then you send it off to a lab like Neogen, Zoetis, or Quantum that will run a profile report for you. These reports can run in price from \$20-\$100 depending on what tests you have run and where. However, the information you gain can help you sell your animal at a premium when you know they have certain traits that producers are looking for.

The basic profile report will tell you and the Association what the basic genetic profile is for that specific animal by which markers it has. Most companies want to see 220 markers that match when verifying a calf to a parent, but there are many more markers than this. These

reports help the Braunvieh Association learn more about the genetic potential of the Braunvieh breed and what these animals are capable of doing not only phenotypically but also genotypically. Through this profile we can see the animals genetic makeup that we can't see with the naked eye, things such as feed efficiency, carcass traits, maternal traits, tenderness of the meat, homozygous in certain traits, or if they are a horn carrier.

Through DNA testing we can even gather a Genetically Enhanced EPD, that tells you what a young calf has the potential of producing over a 10-year period without having to wait for that information to come in. This allows us to cull poor quality animals quicker and make decisions that can move a breed ahead that much quicker. Also, genetic information cannot be altered by climate and how a producer cares for an animal like phenotype can.

Another reason DNA is important to the Braunvieh Association is to verify the parents to the offspring to help protect the herd book. It is especially important that an association makes sure they keep the herd book as correct as possible, so we have accurate information on the cattle registered in it. Potential buyers want to know exactly what they are buying, not an animal created on paper.

We all make mistakes in record keeping due to human error, and then sometimes we have a bull that goes looking for a girlfriend somewhere he is not supposed to be then that messes up our records. Parent Verification also causes breeders to be honest in all of their dealings. So basically, a parent verification test help eliminate a lot of problems and works as a accountability partner.

When a producer collects this valuable information them and the Braunvieh Association gain facts that can give the breed a competitive edge in the cattle industry and helps each to thrive in the future. A DNA sample is like a rutter on a ship, it might be small and unnoticed, but it drives the ship forward. So, don't let the unseen scare you, jump on board with DNA and help make the Braunvieh breed and Braunvieh Association the best it can be.