



The Correct Action is to Report

While all cattle breeds have genetic defects, most are rare and inherited in a recessive manner so that the condition is seen only if a calf inherits the gene from both parents. Two gross physical deformities with lethal consequences in Jersey cattle were documented and declared genetic abnormalities by the American Jersey Cattle Club in the 1970s—Limber Legs (LL) and Rectovaginal Constriction (RVC). In November 2020, a new undesirable genetic factor, Jersey Neuropathy with Splayed Forelimbs (JNS), was identified by the AJCA Board of Directors.

If LL and RVC are new words to you, there's good reason. Both abnormalities were brought under control in the early to mid 80s through a program of reporting affected animals, expert veterinary examination and pedigree documentation, followed by Board designation and labeling of carrier animals. JNS is beginning a similar process with an important additional tool of genotyping. It has identified the genetic variant responsible for JNS. Genotyped animals have carrier (JNSC) and test free (JNSF) status clearly labeled on pedigrees. Sound herd management practices that consider the risk of JNS should provide the means to minimize its impact.

Why bring this up? Because unrecognized or ignored—for whatever reason—abnormalities that prove to be genetic in origin can wreak havoc on and devastate the finances of owners, as most famously happened to North American Herefords because of dwarfism. The lesson of Professor L.P. McCann's story, *The Battle of Bull Runts*, is this.

Any time, every time an abnormal animal is born, or an abnormality develops in an animal—no matter what one suspects the cause to be—the only correct action to take is to report it to the breed association.

There are three important ingredients in controlling genetic abnormalities: reporting, labeling carriers, and making this information available to the people making breeding decisions. Accordingly, the American Jersey Cattle Association adopted in 1983 the *Policies Regarding Undesirable Genetic Factors*, although its procedures were defined many years prior with the first reports of Limber Legs. It is built upon the foundations of documentation, scientific research, due diligence and openness.

- It is “the responsibility and obligation of each member of the Association and each breeder of Jersey cattle to report any known case of an abnormal Jersey animal.”
- The association maintains a recording system to monitor abnormalities in Jersey cattle and, based upon expert

scientific advice, has defined procedures to determine if the source of an abnormality is genetic as opposed to being the result of environment or an infectious agent.

- It is “unethical practice to offer for sale an animal, male or female, an embryo or semen from an animal that has been designated a carrier of an undesirable genetic factor without first informing the prospective buyer of this fact.”

The policy has served this breed well in the past and will do so again if it ever becomes necessary, *“but only to the degree that all cooperate in the acceptance and enforcement of this policy.”*

Effectiveness of the AJCA's abnormality program depends almost entirely upon reporting—reporting to the Association, reporting through the communication channel defined by policy, reporting at first observation, reporting in full detail.

The incidence of an abnormal condition—by definition—is low. It's out of one's daily experience. The possibilities for an affected animal to not be found, *much less reported*, are endless. If one of them died as a calf, or was killed by lightning, or was culled because she didn't settle to the pasture bull ... you see how easy it would be to miss an affected animal. Forty years ago, we talked about “the eye of the master.” Most milked their own cows most days of the week. Today, more are managing labor than being labor, herds are larger and heifer raising may be done at some distance from the milking herd. Seeing and reporting is in the hands of others who may not have the same personal investment you do. Without being vigilant, and training employees to be equally attentive, a costly, perhaps even lethal abnormality can be perpetuated at the expense of all.

The question always arises, “What do I report?” It's simple. If it's out of the ordinary in your experience, pick up a phone and dial 614/861-3636.

Time does matter and nothing can happen without a complete report received in the Association office. “Complete” starts with identification of the animal and its parents. Take a Tissue Sampling Unit (TSU), or pull hair, as you would for genotyping, and store it in a baggie clearly labeled with the animal identification. Take pictures and videos. Document the details on the *Report Form for Abnormalities* and get it to the Association office. It is online at <http://bit.do/AbnormalityPolicy>, or we will send it to you.

It doesn't matter *what* you see. It matters that you report it, if it doesn't look right.