

PTP Shows Contribute to Our Success

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Obviously, exhibiting SimGenetics is important to our membership. Shows provide opportunities for ASA members to meet potential customers, review cattle produced by others, get unbiased evaluations from notable judges, and enter into conversations of sire selection and production ideas.

On the other hand, each year, hundreds of ASA members who hardly own a rope halter, let alone have the inclination or ability to ready cattle for either a national show or their county fair, sell huge numbers of bulls and heifers. How does our Association blend and service two significantly different businesses?

For decades, we've tried to describe and justify the genetic change impacts of seed-stock producers exhibiting cattle, and consequently, producing show winners. The following is an attempt to sort out the opportunities and pitfalls of show ring results on advancing Simmental genetics.

Before ASA initiated Progress Through Performance (PTP) Shows, "judging" was all about conformation. Before our Association leaders decided shows had to change, things like calving ease, marbling, and all the important information from our powerful database were ignored.

By the late 1980s, Simmental and Simbrah Genetics were losing the battle for beef industry importance. Popular show-winning SimGenetics were very large framed, nearly free from fat, and our genetic trends for calving ease, stayability and carcass quality were headed in the wrong direction.

Just look at old Angus and Chi photos, our breeds weren't the only ones selecting for traits that increased ADG and reduced fat; genetics that we hoped would improve profits for feedyards and packers. However, back in cowherds, birth weight, mature size, and nutrition requirements to keep cows repro-

ducing were "sky-rocketing". And, because Simmental/Simbrah started from disadvantaged positions (that is, more birth weight, more milk and larger mature size than many breeds), we were being pushed to completely unmanageable calving ease, cow size and steer finishing weights. There is no doubt, selection for big-framed, late-maturing show ring winners during the 1980s slowed SimGenetic progress.

It really did take some strong ASA leadership to change the long-held position of hands-off shows, and to convince our members that the addition of genetic information would remedy our problems. How could we change our behavior of rewarding only physical beauty, to preferring animals with both advantageous genetic records and exceptional conformation?

The road to selecting show winners with both superior breeding values and conformation advantages has been challenging. All of us have witnessed PTP Shows where winners' EPD profiles were not impressive. Only in the most unusual circumstances has a physically plain or unattractive bull or heifer received preferential placing because of their "paperwork".

With audiences primarily oriented toward conformation improvement, it's exceptionally difficult for judges to put blue and purple ribbons on less-than-beautiful animals even if their EPDs are fantastic. How many of us would be comfortable "slapping" a champion with super-high API combined with unattractive muscling, frame size and skeletal soundness?

Without doubt, both genetics and physical features play a role in the success of nearly every cowherd and feedyard (whether they know it or not). Physically attractive cattle catch the eye of potential customers, in the pasture, sale ring, and even packer-buyers visiting feedyards. For the good of every SimGenetic Breeder in our business, and our members' customers, there is no reason that we should ignore either conformational or genetic indicators of worth.

The following series on topics of SimGenetic seedstock evaluation are designed to reflect on and summarize realistic opportunities to continue the advance of Simmental Influence on the world's beef businesses.



Part 1. Evaluating and emphasizing skeletal soundness in shows.

All judges comment on preferences of skeletal traits. Freer moving, more correct better joint angle, sounder footed, deeper heeled, rounder ribbed, and deeper ribbed are common comments. Unlike plants and invertebrate animals that are immobile, food animals require locomotion to live, reproduce, and harvest dietary nutrients. We may falsely assume show ring visual skeletal features relate to the lifetime potentials of important traits such as forage intake, environmental adaptation, health and robustness, cow longevity, and/or sire serving capacity.

However, isn't it reasonable to presume normally mobile animals free from obvious limitations, deformities, swelling, inflammation, etc. have greater lifetime production expectancy than those with skeletal problems? Emphasis on soundness seems like a reasonable visual trait to consider. After all, becoming **the best maternal Continental genetic source** is one of SimGenetic Breeders' highest priorities. And, fertile longevity is the most important cowherd economic trait.

Fertile longevity is a huge component of Stay EPD, and stay is a powerful part of API. It may be a "leap of faith" to assume the joint and hoof "things" we see for a few minutes in shows relates to the lifetime hoof shapes and function of joints of cows.

There may be too many assumptions to deal with here, but the following is what we must accept if show ring soundness evaluations can contribute to genetic improvement:

- Soundness differences (good and bad) in the show ring reflect soundness differences when the same animals are in production environments.
- Soundness differences used to rank animals in the show ring are significant enough to make a difference in production/reproduction in everyday environments.

Perhaps, our near-obsession with skeletal evaluation combined with focused selection for API, is the "yellow brick road" to establishing SimGenetic dominance of Continental maternal value. After all, isn't it good risk management to combine both genetic and physical information to select for prospects of longevity? Poor footed, stiff jointed cattle often just don't make for problem free production. We need to nurture both the perception and reality of great genetic value for fertile longevity in SimGenetics.

Wouldn't it be great if all Simmental influenced cows could routinely wean a calf every year until they were 14 + years old, and require no special maintenance such as hoof trimming or isolated paddock living?

Questions and Answers:

Question: *What is the best way to explain how you evaluate skeletal soundness?*

Reimer: I like to evaluate soundness from the ground up and when cattle are on the move. Issues that you may question when livestock are standing express themselves more vividly while in motion. Cattle that are sound in their skeletal makeup will be very fluid and easy in their movement. Management, nutrition and genetics to varying degrees can affect skeletal soundness.

Rincker: Looking from the ground up, the front toes and rear hooves should point reasonably straight ahead as cattle move avoiding "toeing out" or "toeing in. The pastern area, the hock, and the knee require flexion to cushion the individual's weight and mass and yet too much give may result in cattle being "weak in their pasterns", "sickle-hocked" or even hocks turning in considered "cow-hocked", and may cause cattle to walk under themselves and dropping their pins. Cattle that lack joint flexion will appear straight on the travel, may labor in their movement seen by raising and dropping their head during travel, and ultimately affecting shoulder angle by making it appear steep from the withers to the point of the shoulders.

Ropp: Carefully inspect foot structure (size, heel depth and claw symmetry) and then evaluate optimum joint angularity with flex and agility of movement. Structure is primarily mechanical and when ideal, is designed to absorb shock and thus protect cartilage throughout the system. Square feet and travel too function to minimize wear and tear on joints for the long haul. Long term protection of cartilage and maintaining the integrity of hoof structure are two big keys.

Question: *Since exhibited-cattle come from so many herds, do you trust that differences in skeletal soundness will be replicated in each animal's progeny?*

Reimer: I think they will be replicated in varying degrees if the problems are caused by inheritance from parents.

Rincker: Cattle are presented for show in various body conditions with higher conditioned cattle providing more challenges on movement instinctively tied to the higher grain intake and shear body mass. However, even with cattle presented in a variety of conditions from different feed regimes, the indicators or proneness an animal has for unsoundness will exist with all types of body condition and will most certainly be passed on, both positive and negatively in their progeny. The challenge for all of us is to understand both genetic structural problems that may affect movement and those structural problems brought on by environment namely management differences, confinement and lot conditions, and diet.

Ropp: Yes, even among non-contemporaries, the heritability of soundness appears significant. There is little doubt however that the excessive feeding strategies that many exhibition cattle are subjected to can have a negative impact on feet and leg soundness. This is especially true when you get into the older divisions where abnormal weight for age and obesity is more common.

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Questions and Answers:

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Question: *When cattle have their feet trimmed for shows, are you comfortable comparing foot quality differences?*

Reimer: Over the past 40 years, I've seen some very artistic methods utilized to enhance or repair hoof issues, some possibly genetic, but most due to management or nutrition. I do feel comfortable in that I believe most breeders are removing those cattle from the population before they start the preparation process for exhibition.

Rincker: There is no question that a good foot trim will make it easier to talk about "toeing straighter ahead", having "more depth to the heel", and "more uniform in his/her toe size" than that heifer/bull that was not handled properly during trimming. However, as we continue on higher fiber diets with less grain, and add to that larger paddock sizes providing more exercise, our cattle continue to require less of a foot trim. If you judge cattle, you likely have heard from an exhibitor of a poor moving animal that "Yes, we just trimmed feet a few days ago"; but, unfortunately perception becomes reality so if they look unsound to the evaluator, most judges respond by placing them as if they were.

Ropp: Yes, but trimmed feet are more difficult to evaluate. They do however usually still show symptoms of the original issues that required the alteration if you take time to look closely at them.

Question: *It's reasonable to assume skeletal soundness impacts many production traits such as growth, reproduction/Stay, and feedyard performance. Would "pressuring up" API and TI also improve the genetic control of skeletal soundness?*

Reimer: I agree it would be a reasonable assumption. At the same time I hope we can identify those problems in a timelier manner to rectify the problem whether it is through the animals genetic makeup or caused by some other environmental issue.

Rincker: I think we are doing a better job at emphasizing both API and TI particularly at the breeding level and in those herds that tend to measure more, whether it be weights, hip heights, or ultrasound data now indicated by a herd's score and compliance to the Performance Advocacy. To answer the question of "pressuring up" API and TI and impacts on skeletal correctness, I believe is already happening at an accelerating pace. Buyers are requiring more data that can be used to specifically apply to their programs and breeding scenarios so while correctness directly impacts milking ability, performance, Stay, and carcass merit, it also will link back to and impact our valued dollar indexes of API and TI.

Ropp: I don't know, the relationship is probably there, but not necessarily strong. I would however presume improving Stay EPD also improves lifetime soundness traits.

Question: *Relative to your view of breeding better cattle and better beef, what is your best comment about the status SimGenetic of skeletal soundness relative to other breeds?*

Reimer: I do believe skeletal soundness is the foundation for breeding better cattle and better beef. SimGenetics add a little more mass and durability relative to skeletal design and soundness. These are important pieces of the puzzle as we require cattle to survive harsh conditions, gain more on less, breed on time, have greater longevity and produce carcasses that will yield more high quality product.

Rincker: The reasonably sound SimGenetic cattle of today have not always been that way as over time (roughly 40 years since our first importations) we have improved our understanding of correctness and how to select for it. We have a breed that came from an origin of being a high milk, fast performing breed and as we continue to add shape to our cattle the structural challenge will continue. The Continental breeds relative to English Cattle Breeds were expected to have more muscle and less fat trim bringing on our early challenges with structure and yet our breeders have addressed those concerns through selection and the use of "breed complementation" as opportunities to improve SimGenetic soundness.

Ropp: Over the past 20 plus years Simmental has made huge strides in the area of structure and soundness. Through direct selection for soundness and reduced mature size, today's Simmental compare well to other breeds where once there was reason for concern. On a very positive note, Simmental foot quality is generally more functional than Angus or Red Angus. There is clearly more heel, foot symmetry and fewer issues with long, misshapen toes. Joint angularity and flexibility however are not always strengths for Simmental when compared to other breeds. More muscular cattle tend to have less joint angle and be slightly less flexible than lighter muscled individuals. That is generally true both within and across breeds. This is not to say that we can't have both and in fact one of our jobs is to use selection to do just that. ♦

