

What would cause a bull with a low birth weight EPD to have a low calving ease maternal EPD? How should birth weight and calving ease maternal EPDs be taken into account when considering raising replacement females? This week we will analyze the correlation between birth weight and calving ease maternal EPDs, and discuss how to best implement EPDs on replacement females.

First, it is important to have a clear understanding of what each of these EPDs represents. The birth weight EPD is a predictor of the sire's ability to transmit his birth weight to his progeny compared to that of other sires. This EPD is expressed in pounds. A bull with a low birth weight EPD will be more likely to sire a lighter weight calf at birth compared to a bull that has a high birth weight EPD. The calving ease maternal EPD represents the average ease with which the sire's daughters will calve as first-calf heifers when compared to daughters of other sires. This number represents the difference in percentage of unassisted births, with a high value indicating a greater amount of calving ease in the bull's daughters when they have their first calf.

It is common to observe an inverse relationship between the birth weight and calving ease maternal EPDs. This is likely caused by the small pelvic size that is created when a producer selects for low birth weight calves. Because producers aim to reduce the occurrence of dystocia (calving difficulty), they are also producing cattle that will have small calves at birth. Though this may be achieved, these small light weight calves tend to be smaller for the duration of their lives (including a smaller than desired pelvic size). Retaining these smaller heifers provides greater opportunity for cases of dystocia to occur due to the small pelvic areas of the females. This is how a poor calving ease maternal EPD may be a result of a low birth weight EPD.

Whether you plan to raise or purchase your replacement females, it is a good goal to get a live, healthy calf on the ground when planning to breed a female for the first time. This can often be done by breeding your virgin females to a low birth weight EPD bull that also has good calving ease EPDs. Typically, calves out of these females will not be retained as replacements, so it will not be an issue for you if these females have small pelvic areas at maturity. Often, low birth weight calves are created by using cattle that will produce lighter muscled, smaller boned calves. Breeding virgin females to this type of bull that also has a good calving ease and low birth weight EPD will help you get a live calf on the ground out of the younger, less experienced females.

It is good to shift your management plan and EPD selection criteria when breeding the female for her second calf, and each calf after that. At this age, the females should be mature and experienced enough to have heavier calves at birth. Therefore, selecting for low birth weight bulls may not be necessary. Instead, you may want to try to create females that will be used as replacements. If this is your goal, an emphasis should be put on the maternal EPDs. When selecting for these EPDs, it is best to select the bull(s) that have overall good EPDs across the board, and not just in one or two areas. If you are producing replacement females it is best to choose the bull that is the most well-rounded and that will produce females that will perform well the duration of their lives.

Before selecting for a particular EPD, take into account the other factors involved. How do the other EPDs look? What is your goal for the calf that you are trying to produce? Has the female had a calf before? In some cases it is good to pay close attention to a certain EPD, but be careful so that you are not so zoned in that you miss the big picture and fail to see how the other factors may negatively affect it. Please let us know if you have any questions about EPDs, or would like assistance with selecting EPDs for your herd.

Thanks,

Dr. Jesse Richardson, DVM

Henderson County Veterinary Hospital

903-675-5613

hcvethosp@me.com

hcvethospital.com