

Can Crossbreeding Help Calving Ease?
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Question:

I am thinking of breeding my Holstein heifers to either Jersey, Milking Shorthorn, or Ayrshire to promote ease of calving. Will that help?

Response:

Calving ease is a concern. About 30% of first calf heifers experience difficulty when calving compared to about 10% of second and later lactation cows. The keys to minimizing calving ease problems are well grown heifers mated to bulls with good calving ease proofs. It takes both.

Calving ease proofs are only calculated for A.I. Holstein bulls. Recent summaries show over 300 A.I. bulls with evaluations of 5% or less for difficult births of heifer mates. There is no way to determine calving ease evaluations for natural service bulls.

Addressing calving ease by breeding Holstein heifers to bulls of a smaller breed such as Jersey, Ayrshire, or Milking Shorthorn will likely produce smaller calves but that outcome is not guaranteed for all calves. There is evidence that the dam controls fetus growth but this must be balanced against the genetics of the fetus for size and growth which it inherits from its sire and its dam. The genetics of the sire for size can be critical.

Crossbreeding and calving ease are issues which need to be dealt with separately. If the decision is made to crossbreed then consideration of calving ease can be factored in.

There are limited research data on calving ease of Holstein heifers mated to either Jersey or Ayrshire bulls compared to straightbred Holsteins.

A British study of almost 50 years ago showed that Friesian heifers bred to Jersey sires had a significantly lower percentage of dead calves than Friesian heifers bred to Friesian sires.

A Canadian study completed about 15 years ago found no statistical difference in percentage of dead calves at birth between Holstein heifers mated to Holstein sires and Holstein heifers mated to sires of an Ayrshire-based line. However, the death rate of calves born to first cross Holstein X Ayrshire-based line or Ayrshire-based line X Holstein crossbred heifers was significantly lower than that of Holstein heifers bred to

Holstein sires.

These data would seem to support the idea of crossbreeding to reduce calving difficulty problems. I know of no comparable research involving Milking Shorthorn bulls mated to Holstein heifers compared to straightbred Holstein.

When it comes to sire selection, if calving ease is a concern, do the following...among bulls in the 80th percentile or above for NM\$ or CM\$ choose bulls with less than 8% difficult first births. For bulls of breeds other than Holstein with no calving ease information, you should avoid those with proofs for large body size composite.