

As an industry we have always selected for improved calving ease. Over time that selection intensity reduced the number of poor calving ease sires. Incidence rates for difficult births on farm decreased dramatically over time; well below 8% even though our Sire Calving Ease calculations were still using 8% as the breed average. This created a gap between actual rate of difficult births on farm and calculated SCE PTA's. SCE predictions no longer reflected actual incidence of difficult births and needed to be adjusted. A contributing factor to our greatly reduced incidence of difficult births is our progress in reducing gestation length. The Holstein population went from an average of 279 DCC (days carrying calf) and is now slightly below 276 DCC, over a 3-day difference.

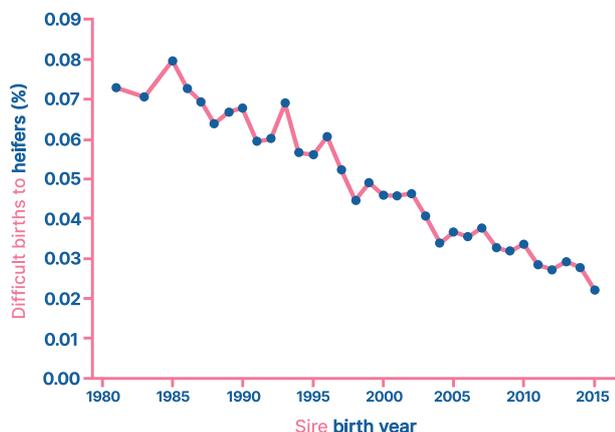
Breed	Trait <sup>1</sup>	Current base (%)	New base (%)	Change	New base year
Holstein	SCE	7.9	2.2	-5.7	2015
	DCE	8.5	2.7	-5.8	2010
	SSB	8.0	5.7	-2.3	2015
	DSB	8.0	6.6	-1.4	2010
Brown Swiss	SCE	5.2	3.0	-2.2	2015
	DCE	5.2	2.8	-2.4	2010

<sup>1</sup>SCE = sire calving ease, DCE = daughter calving ease, SSB = sire stillbirth, DSB = daughter stillbirth.

## SCE: Sire Calving Ease

- The average for SCE in Holsteins was 8%. That number was based off the incidence of difficult births in the 1980's.
- With its recent adjustment the CDCB has calculated the actual average for difficult births in heifers to be 2.2% in the year 2020.
- This number (2.2%) is now the base (breed average) for SCE PTA's.
- This improvement in Calving Ease was accomplished with genomic selection and actual management improvements.
- Note that the sire rankings did not change, only the SCE number which now reflects the bull's actual percentage of difficult births in heifers.
- Going forward the phenotypic averages will be updated with the regular genetic base changes to avoid another massive update as was experienced this August.

## SSB: Sire Still Birth



- Before August 2020 Sire Calving Ease data was based on difficult births recorded in heifers, while Sire Still Birth information used data from both Cows and Heifers.
- With its August update, the CDCB is now including data only from heifers in its Sire Still Birth calculations.
- Sire Calving Ease and Sire Still Birth PTA's are now calculated from a uniform group of animals.
- With the previously mentioned changes to Sire Still Birth PTA's, Holstein sires now average 5.7% still birth rate in heifers.
- The changes in evaluations for Sire Still Birth and Sire Calving Ease would indicate that instead of focusing on Sire Calving Ease, producers should focus on Sire Still Birth rate in their sire selection.

## GL: Gestation Length

- Reduced Gestation Length is impacting both Calving Ease and Still Birth in Holsteins.
  - A shorter Gestation Length means a smaller calf but can also result in higher rate of Still Births.
  - In the last ten years Holstein Gestation Length has decreased from 279 days to 276 days.
  - Holsteins now have the shortest gestation and calving interval of any breed.
  - If Gestation Length gets too short it may have a negatively impact the population by causing an increase in still births
  - To protect from this STGenetics recommends that producers focus on Sire Still Birth rates to ensure that Gestation Length does not have a negative impact in their herds.
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## Bibliography

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