Survival and Australian breeding indices Technote 4

HIGHLIGHTS

- Selecting for Australian breeding indices improves survival and the drivers of business performance.
- Survival is included in Australia's three dairy breeding indices: Balanced Performance Index (BPI),
 Health Weighted Index (HWI) and Sustainability Index (SI).
- By using these indices, you will be breeding cows that last longer in the herd.

Breeding for survival

Survival – also known as longevity or productive herd life – refers to an animal's ability to produce daughters that last in the herd for many lactations. For bulls, it refers to a bull's ability to produce daughters that last longer in the herd.

Survival is a significant contributor to dairy business performance. By improving longevity:

- fewer replacements are needed, which means lower heifer rearing costs (or greater income as surplus heifers are sold);
- the herd is more mature more mature cows produce more milk than younger cows;
- a greater proportion of the culling decisions can be based on production, resulting in an increase in the average production of the herd.

BPI, HWI, SI

The three indices – BPI, HWI and SI – include the trait groups that influence profit and longevity in the herd:

- Production (ASI)
- Health & Fertility (Mastitis Resistance, Fertility and Survival)
- Workability
- Type
- Feed Saved (except for Jerseys).

While a cow's survival in the herd is influenced by production, fertility, cell count, type and workability, it is also influenced by other traits that we don't measure such as lameness, metabolic disorders, maternal calving ease and susceptibility to disease.

Response to selection

The breed-specific bar charts on the follow page show the expected response of survival to selection using the BPI or HWI.

More information

DataGene Ph (03) 9032-7191 Email: abv@datagene.com.au www.datagene.com.au December 2020



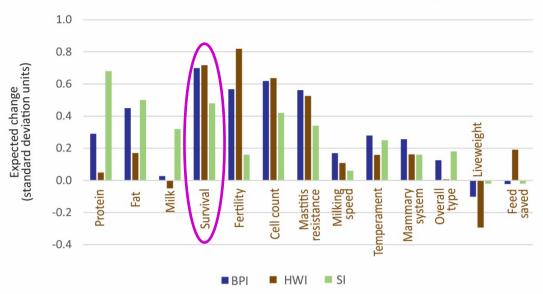
About DataGene

DataGene is an independent and industry-owned organisation responsible for driving genetic gain and herd improvement in the Australian dairy industry. DataGene performs pre-competitive herd improvement functions such as genetic evaluation, herd testing and herd improvement software development and data systems. DataGene is a Dairy Australia and industry collaboration.

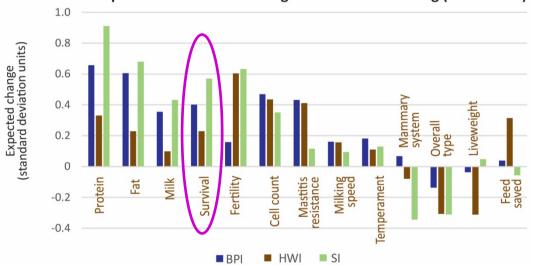
www.datagene.com.au Ph 03 9032 7191 E: abv@datagene.com.au



Response to selection over 3 generations of breeding (Holstein)



Response to selection over 3 generations of breeding (Red breeds)



Response to selection over 3 generations of breeding (Jersey)





