

# The Slick Gene - what is it?

## And why every dairy farmer should take notice!



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HOLSTEINS

The Slick gene is a naturally-occurring genetic mutation that results in a shorter-hair coat in livestock, for example, it can be found in native Senepol cattle in the Caribbean. The University of Florida successfully introduced the Slick gene into the Holstein breed in the 1980's by natural cross-breeding (not via genetic manipulation) and eventually produced Holstein progeny that achieved sufficient merit for commercial use. For more on the University of Florida's history with the Slick gene please visit <https://www.youtube.com/watch?v=MHLjgl3gEGM>

Livestock with a shorter hair coat are known to be more heat tolerant – research studies at the University of Florida confirm that. Also research in other places comes to the same conclusion e.g. in New Zealand <http://www.aaabg.org/aaabghome/AAABG24papers/25Donkersloot24094.pdf>. The difference in body temperature between a Slick animal and a non-Slick animal can be significant with the Slick animal maintaining a body temperature typically between 0.5 and 1 degree C lower under adverse THI conditions. The result is that the Slick animal is able to maintain milk production despite higher ambient temperature and humidity situations. Slick animals ought therefore be at a natural advantage in adverse environments such as in tropical and sub-tropical climates. Moreover, climate change and rising temperatures are creating conditions in all dairy regions throughout the world where Slick animals will have a natural advantage for part, if not all, of the year. For any dairy-farmer the question becomes why should my cows be wearing a thick fur coat in hot and humid conditions? Slick Holsteins with a shorter-hair coat provide an obvious answer to that question.



**SLICK-GATOR BLANCO (SLICK)** - GTPI 1977, NM 68, gBPI 205

worldwide and have, in many cases, become preferred choices for dairy-farmers. Slick genetics will likely undertake a similar journey and within a few breeding cycles can be expected to substantially close the gap to the Holstein breed-leaders.

At Vala Holsteins the genetic development of Slick animals is well and truly evident. Starting with one of the Slick sires bred by the University of Florida called Slick-Gator BLANCO, Vala Holsteins now has BLANCO grandsons that not only carry the Slick gene but also carry the A2 and polled genes. BLANCO had a TPI in December 2022 of 1977 and a Net Merit of +68 – which is obviously a long way from current breed-leaders at GPA TPI of 3000+ and Net Merit of 1000+. However, Vala Holsteins already has a BLANCO grandson with a very respectable GPA TPI of 2578 and a Net Merit of 512 – and with a PTAT of +1.64 he doesn't sacrifice type either. At this rate of genetic development the gap between Slick Holsteins and the Holstein breed-leaders will close rapidly such that the heat tolerance superiority offered by Slick Holsteins would offset any remaining difference in index points and Slick animals would then become the preferred choice. Vala Holsteins is breeding Slick Holsteins to accelerate and achieve that objective – while, at the same time, delivering on its other breeding goals of A2A2, BB and polled – plus type/conformation and health & fitness traits. Dairy-farmers introducing the Slick gene into their herds now can get an immediate improvement in heat tolerance of their next progeny and, looking forward, can anticipate access to ever-improving Slick genetics to keep building upon each generation of Slick animals in their herd. Vala Holsteins is breeding a bull team for semen collection in order to satisfy the emerging market demand for Slick Holsteins – for enquiries on semen availability and prices please contact [info@valaholsteins.com](mailto:info@valaholsteins.com)

**Vala Holsteins**

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**VALA BLANCO SUNNI (SLICK)** - GPA TPI 2337, NM 328, gBPI 174



**VALA BLANCO LOCUST (SLICK)** - GPA TPI 2241, NM 221, gBPI 288

Vala Holsteins is a leader in Australia in the breeding of Holstein cattle. For more on Vala Holsteins and its breeding philosophy please visit <https://www.valaholsteins.com/blogs/news/breeding-philosophy>. Over the years Vala Holsteins has been breeding for traits such as A2A2 and polled. Both of these traits started from positions of inferiority compared to the index ratings, milk production, conformation and health & fitness traits of the then breed-leaders (i.e. non-A2A2 and horned Holsteins). However, in a relatively short period of time, breeders have closed the gap such that A2A2 and polled animals now compete at the very top of all major Holstein indexes



**VALA SUNSATIION-PC (SLICK)** - GPA TPI, 2578, NM 512, gBPI 289

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