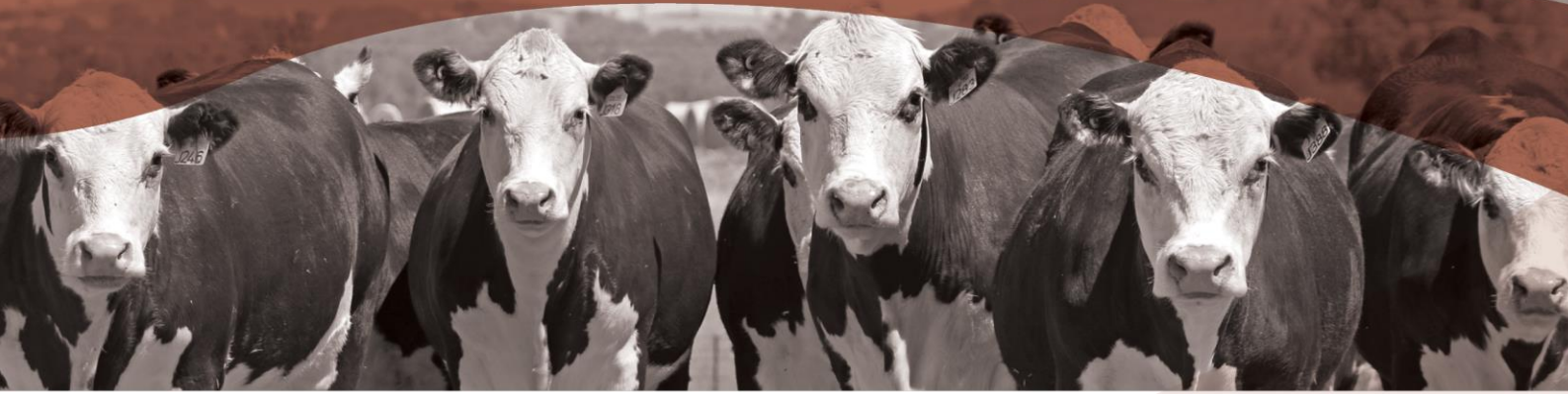


Understanding SNP Based Poll Tests

*Updated February 2020



Herefords Australia moved to SNP based DNA testing in July 2016, giving breeders a far more accurate test for Poll genes in Hereford Cattle. Previously used Beef CRC based Poll tests would return a result and an accuracy (e.g. Homozygous Polled 98%). With SNP based Poll testing, a description of the specific poll allele found is included as a subscript.

When reporting Poll test results from a SNP based test, the results will be reported as seen below:

SNP Test Result	Beef CRC Test Result	Detail
Pc Pc Pc Pf Pf Pf	PP	Homozygous Polled A 'True Polled' animal and will only produce Polled (or Scurred) calves, they will not produce Horned calves.
HPc HPf	HP	Heterozygous Polled Animal is Polled or Scurred and carries a Polled and Horned gene and can produce Polled, Horned (or Scurred) calves.
HH	HH	Homozygous Horned The animal is horned and can produce Horned, Polled (or Scurred) calves.

Any animal that is tested to be Homozygous Polled will have (PP) automatically added as a suffix to their name on the Herefords Australia database.



HEREFORDS
Australia

16 Uralla Road | Locked Bag 7
Armidale NSW 2350
Phone +61 2 6772 1399 | Fax +61 2 6772 1615

herefordsaustralia.com.au

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Potential mating outcomes:

Mating a Homozygous Polled animal
with a Homozygous Polled animal (PP x PP):

	P	P	
P	PP	PP	100% Homozygous Polled (PP) calves
P	PP	PP	

Mating a Homozygous Polled animal
with a Heterozygous Polled animal (PP x PH):

	P	H	
P	PP	PH	50% Homozygous Polled (PP) calves
P	PP	PH	50% Heterozygous Polled (PH) calves

Mating a Homozygous Polled animal
with a Homozygous Horned animal (PP x HH):

	H	H	
P	PH	PH	100% Heterozygous Polled (PH) calves
P	PH	PH	

Mating a Homozygous Horned animal
with a Homozygous Horned animal (HH x HH):

	H	H	
H	HH	HH	100% Homozygous Horned (HH) calves
H	HH	HH	

Mating a Heterozygous Polled animal
with a Homozygous Horned animal (PH x HH):

	H	H	
P	PH	PH	50% Heterozygous Polled (PH) calves
H	HH	HH	50% Homozygous Horned (HH) calves

Mating a Heterozygous Polled animal
with a Heterozygous Polled animal (PH x PH):

	P	H	
P	PP	PH	25% Homozygous Polled (PP) calves
H	PH	HH	50% Heterozygous Polled (PH) calves
			25% Homozygous Horned (HH) calves



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