



## How to interpret the EPD lamb report (all EPDs) :

1		2		3								
Lamb(Sex)		Sire	BirthWt	Estimated Progeny Differences								
GAIN(%)	CARC(%)	Dam	50 Adj	Lamb Survival	Birth Weight	Ad. 50 Wt.	Gain 50-100d	Ultra Loin	Ultra Fat			
MAT(%)	MAT-U(%)	Inbreeding	100 Adj	EPD Dir Mat	EPD Dir Mat	EPD Dir Mat	EPD Dir	EPD Dir	EPD Dir			
MAT-HP(%)	MAT-UHP(%)	BirthDate	ADG	Acc Dir Mat	Acc Dir Mat	Acc Dir Mat	Acc Dir	Acc Dir	Acc Dir			
		# Born	Adj Loin	% Dir Mat	% Dir Mat	% Dir Mat	% Dir	% Dir	% Dir			
		# Raised	Adj Fat	Age First Lamb	# Born First	TWtWn1st	Lambing Interval	# Born Later	TwtWn+			
				EPD	EPD	EPD	EPD	EPD	EPD			
				Acc	Acc	Acc	Acc	Acc	Acc			
				%	%	%	%	%	%			
<b>Breed DP</b>												
<b>CEPO00706D(F)</b>		CEPO80212W	5.0	-0.02	0.03	0.40	-0.08	1.39	-0.66	0.86	0.82	0.51
9.74 (95)	6.83 (92)	CEPO8749T	25.3	4	3	54	20	35	17	63	69	76
-1.65 (86)	0.64 (89)	0.0136	42.9	41	50	98	1	98	3	93	94	1
-8.94 (87)	-5.29 (89)	2016-01-01	0.35	1.60		-0.22		-0.15		0.02	-0.25	0.03
		1	26.09	0		0		0		5	23	23
		1	5.12	14		4		89		75	10	90

### 1. Animal Identification and Selection Indexes :

#### Lamb basic information

Lamb ID (Tattoo)  
Lamb sex

#### No ultrasound

Gain Index (GAIN)  
Maternal Index (Mat)  
Maternal Higher Prolificacy Index (MAT-HP)

#### With ultrasound

Carcass Index (CARC)  
Maternal Ultrasound Index (Mat)  
Maternal Ultrasound Higher Prolificacy Index (MAT-HP)

### 2. Raw data :

Sire ID (Tattoo)  
Dam ID (Tattoo)  
Lamb inbreeding  
Birth date  
Number born  
Number raised  
Birth weight  
50 day adjusted weight (50 ADJ)  
100 day adjusted weight (100 ADJ)  
Average daily gain between 50 and 100 days (ADG)  
Loin eye depth actual  
Fat cover actual

## How to interpret the EPD lamb report (all EPDs) (following) :

Estimated Progeny Differences						
Lamb Survival EPD Dir Mat <b>A</b> Acc Dir Mat % Dir Mat	Birth Weight EPD Dir Mat <b>C</b> Acc Dir Mat % Dir Mat	Ad. 50 Wt. EPD Dir Mat <b>E</b> Acc Dir Mat % Dir Mat	Gain 50-100 EPD Dir <b>G</b> Acc Dir % Dir	Ultra Loin EPD Dir <b>I</b> Acc Dir % Dir	Ultra Fat EPD Dir <b>K</b> Acc Dir % Dir	
Age First Lam EPD <b>B</b> Acc %	# Born First EPD <b>D</b> Acc %	TwtWn1st EPD <b>F</b> Acc %	Lambing Int EPD <b>H</b> Acc %	# Born La EPD <b>J</b> Acc %	TwtWn+ EPD <b>L</b> Acc %	

### 3. Estimated Progeny Difference (EPD) :

Letter	EPD	Use
A-1	Lamb Survival direct	To select ewes which will produce lambs that have a better ability to survive to weaning due to the lamb's own genetics.
A-2	Lamb Survival maternal	To select ewes which are better at helping their progeny to survive to weaning.
B	Age First Lambing	To select ewes which will give birth to daughters that will produce progeny earlier.
C-1	Birth Weight direct	To select animals which will produce lambs that are heavier in live weight at birth due to the lamb's own genetics.
C-2	Birth Weight maternal	To select ewes which will produce lambs that are heavier in live weight at birth due to the ewe's larger womb and her ability to provide nutrients to the fetus.
D	Number Born First Lambing	To select ewes which will produce daughters that give birth to more progeny during their first lambing.
E-1	50 Day Weight direct	To select animals which will produce lambs that are heavier in live weight at 50 days of age due to the lamb's own genetics.
E-2	50 Day Weight maternal	To select ewes which will produce lambs that are heavier in live weight at 50 days of age by having a greater potential for milk production and mothering ability.
F	Total Weight Wean 1 <sup>st</sup> lambing	To select ewes which will produce daughters that will wean heavier lambs at their first lambing. Increase the total kg of the litter by number of lambs weaned and the lambs' weights at weaning.
G	Gain 50-100 Day direct	To select animals which will produce lambs that will have a faster growth from 50 to 100 days of age due to the lamb's own genetics.
H	Lambing Interval	To select ewes who will take less time between subsequent lambings.
I	Loin Depth	To select animals which will produce lambs that contribute to higher lean meat yield. This value estimates the difference between animals in loin eye depth.
J	Number Born Later	To select ewes which will produce daughters that give birth to more progeny at later lambings.
K	Fat Cover	To select animals that will produce lambs that are leaner. This value estimates the difference between animals in back fat depth.
L	Total Weight Wean later lambings	To select ewes which will produce daughters that will wean heavier lambs at later lambings. Increase the total kg of the litter by number of lambs weaned and the lambs' weights at weaning.

\*\*\* Look for **more positive EPD** for orange traits and **more negative EPD** for blue traits. \*\*\*

## How to interpret the EPD lamb report (all EPDs) (following):

### 3. Estimated Progeny Difference (EPD) :

#### How to interpret EPDs

<u>Lamb Survival</u>	
EPD Dir	Mat
Acc Dir	Mat
% Dir	Mat
<u>Age First Lamb</u>	
EPD	
Acc	
%	
-0.02	0.03
4	3
41	50
<hr/>	
1.60	
0	
14	

Trait: Lamb Survival

**EPD** direct and **EPD** maternal

**Accuracy** direct and **accuracy** maternal

**Percentile** direct and **percentile** maternal

Trait: Age at First Lambing

**EPD**

**Accuracy**

**Percentile**

EPD Lamb Survival direct (-0.02) and maternal (0.03)

Accuracy direct (4) and maternal (3)

Percentile direct (41) and maternal (50)

EPD Age at First Lambing (1.60)

Accuracy (0)

Percentile (14)

#### Reference:

**EPD** : The performance of an animal is a mixture of its genetics and the environmental conditions in which it was raised. An EPD is the numerical estimate of the genetic value that an animal will pass on to its progeny for a particular trait. An EPD encompasses all performance data on the relatives of the animal, as well as the animal's own performance data. EPDs should be used along with visual selection. It is important to remember that when selecting sheep, the EPDs account for environmental effects, and therefore allow you to choose sheep solely on differences in genetic traits.

**Percentile** : This number reflects the position, in terms of percentile rank, that this EPD is in for the animal's breed. For example, a 90% indicates that the animal is in the top 10% of all animals of the same breed for this trait. 50% is the average of the breed. All animals locate above 50% are better than the average of the breed for this particular trait.

**Accuracy** : This number is an indication of how close the EPD is to the true genetic value of the animal. The greater the amount of performance data that is available, the higher the accuracy for that EPD will be and the less likely it is to change once more performance data is added to the evaluation. Once accuracy is low (below 50) the trait value is likely to change when new data are added.