

Signet Top Ram Lambs Report

The Importance of Breeding

When selecting breeding stock it is important to identify animals with superior breeding potential, but this is difficult without access to performance records.

The Signet Sheepbreeder Service

Pedigree and Performance data collected and stored on the Signet Sheepbreeder database is analysed using a procedure called BLUP (Best Linear Unbiased Predictor). BLUP calculates how much of each animal's performance is due to its breeding merit and how much is due to the environment in which it has been raised.

Estimated Breeding Values

Estimated Breeding Values (EBVs) measure the breeding potential of an animal for a specific trait. They are expressed in the same units as the recorded trait (e.g. kg for eight week weight) and relate to a common baseline of zero, which was the average breeding value when across flock evaluations began.

A recorded ram will only pass on half of his genes to his lambs so his EBVs must be halved in order to estimate the average genetic worth of his progeny. EBVs are easy to interpret, for example:

A ram with an EBV of +4 for 8 week weight is predicted to have the genetic potential to be 4kg heavier at 8 weeks of age compared to a ram with an EBV of 0

Breeding Indexes

Whilst EBVs aid the selection of sheep for specific traits they can also be combined into indexes to breed for a specific breeding objective.

Accuracy Values

Accuracy values are printed beside each EBV. These figures, which range between 0 and 99, indicate how close an animal's EBV is to its true breeding value.

Using this Report

This report comprises of raw data and EBVs. Whilst raw data is always of interest, because pedigree sheep are reared in different ways it can make comparisons between individuals reared in different flocks misleading. EBVs provide the only accurate way of comparing the breeding potential of lambs bred in different flocks.

When using this report remember that it is still important to undertake a physical assessment of any ram that you are considering buying. When selecting a ram take into account other features such as fertility and locomotion, and check the pedigree of the animal to avoid inbreeding.

Estimated Breeding Values

- 8 Week Weight EBV (kg) - Selection on high EBVs for 8-week weight will result in faster growing lambs to weaning.
- Litter Size EBV (lambs/ ewe) - Selection on high positive figures will increase the number of lambs born in the flock.
- Maternal Ability EBV (kg) - This is the maternal component of the 8-week weight measurement. High figures indicate breeding lines where females perform well as mothers - maternal care and milking ability.
- Scan Weight EBV (kg) - Selection on this trait will increase growth rate to scanning (21 weeks of age).
- Muscle Depth EBV (mm) - Choosing animals with high muscle depth EBVs will increase lamb muscularity and hence the lean meat content of the carcass.
- Fat Depth EBV (mm) - Selection for negative fat depth EBVs will reduce fat levels in the carcass or enable lambs to be taken to greater carcass weights without becoming over fat.
- Breeding Index - Calculated using EBVs to rank animals for a specific breeding objective

Identity	Date of Birth	Sire Identity	Adj' 8wk weight (kg)	Scan Age	Scan weight (kg)	Musc' Depth (mm)	Fat Depth (mm)	8 Week Weight		Litter Size		Maternal Ability		Scan Weight		Muscle Depth		Fat Depth		Index	
								EBV	Acc	EBV	Acc	EBV	Acc	EBV	Acc	EBV	Acc	EBV	Acc	EBV	Acc
Breeder: Mr N J Bond				Tel: 01503 250224								TREFILL									
UK 0 385307 02074	05/02/2018	UK 0 347586 00118	19.3	136	46.5	26.4	3.4	0.57	55	-0.03	29	-0.77	55	2.62	62	1.05	59	-0.15	60	213	61
UK 0 385307 02066	03/02/2018	UK 0 347586 00118	21.7	138	43.5	27.8	3.9	0.79	55	-0.01	29	-0.24	55	1.85	62	1.10	59	-0.07	60	191	60
UK 0 385307 02027	26/01/2018	UK 0 347586 00118	19.7	146	39.0	24.0	2.9	0.26	55	-0.03	30	-0.34	55	0.59	61	0.44	58	-0.47	59	166	60
UK 0 385307 02007	24/01/2018	UK 0 347586 00118	19.7	148	44.5	26.3	3.8	-0.13	48	-0.04	34	-0.70	48	0.40	58	0.59	55	-0.41	55	165	56
UK 0 385307 02057	01/02/2018	UK 0 347586 00118	18.8	140	37.0	25.2	2.9	0.21	52	0.01	30	-0.41	52	0.32	62	0.78	59	-0.27	60	160	60
Breeder: Dr Jane McMinn				Tel: 01562 710817								CALCOT									
795:1803489	01/12/2017	UK 0 345198 00246	26.8	125	44.0	30.6	2.0	0.52	50	-0.03	19	0.17	50	0.66	58	0.84	56	-0.33	56	177	57
795:1803498	07/12/2017	UK 0 345198 00246	19.5	119	38.5	28.0	2.3	0.00	53	0.02	20	-0.60	53	0.57	59	0.51	58	-0.15	58	136	58
795:1803501	08/12/2017	UK 0 345198 00246	23.9	118	39.0	25.9	1.3	0.05	50	-0.03	19	-0.24	50	0.17	58	0.02	56	-0.37	57	120	57
795:1803497	07/12/2017	UK 0 345198 00246	18.5	119	33.0	25.8	1.9	-0.10	53	0.02	20	-0.60	53	-0.09	59	0.27	58	-0.21	58	112	58
795:1803496	06/12/2017	UK 0 345198 00246	25.6	120	43.0	27.5	3.4	0.38	52	-0.04	26	-0.15	52	0.79	59	0.31	57	-0.01	57	112	58
Breeder: Mr A Gibbs				Tel: 01747 838 854								HARTMOOR HILL									
UK 0 349838 00285	09/02/2018	UK 0 360145 00166	21.6	123	36.0	22.2	1.8	0.97	53	-0.05	30	-0.17	53	2.27	53	0.89	47	0.20	46	158	51
UK 0 349838 00286	10/02/2018	UK 0 360145 00166	22.6	122	36.5	25.1	1.5	0.18	53	0.03	33	-0.61	53	-0.67	58	0.44	55	-0.57	56	150	56
UK 0 349838 00288	14/02/2018	UK 0 360145 00166	20.2	118	41.5	24.8	3.2	0.14	50	-0.03	25	-1.34	50	0.56	53	0.31	49	-0.37	49	147	52
UK 0 349838 00287	03/02/2018	UK 0 360145 00166	18.7	129	35.0	24.3	1.5	0.02	53	0.05	33	-0.60	53	-0.45	56	0.31	54	-0.55	54	144	55
UK 0 349838 00282	06/02/2018	UK 0 349887 00398	23.4	126	42.0	23.3	3.0	0.99	59	-0.05	45	0.19	59	2.54	60	0.62	57	0.43	57	120	58
Breeder: Messrs D & R Wilkins				Tel: 01308 862469								RAMPISHAM									
UK 0 349887 00955	08/03/2018	UK 0 385307 00371	24.7	126	46.0	24.2	2.5	1.60	67	0.04	59	0.99	67	3.80	68	1.65	65	0.44	65	212	67
UK 0 349887 00954	08/03/2018	UK 0 385307 00371	24.1	126	44.0	23.5	2.4	1.50	67	0.04	59	0.99	67	3.54	68	1.57	65	0.43	65	202	67
UK 0 349887 00958	08/03/2018	UK 0 385307 00371	20.6	126	40.0	22.9	1.4	0.85	68	0.01	56	0.02	68	2.05	69	1.14	65	0.23	65	165	67
UK 0 349887 00911	28/02/2018	UK 0 385307 00371	31.9	134	52.0	23.4	3.6	2.10	65	-0.03	56	0.39	65	3.22	68	1.19	64	0.49	64	165	66
UK 0 349887 00893	23/02/2018	UK 0 385307 00371	22.0	139	43.0	23.1	1.8	0.78	66	0.04	59	0.71	66	1.36	68	0.60	64	-0.20	65	164	66