



Central Progeny Test

2013-2018 FOOTROT BREEDING VALUES

Footrot breeding values

CPT SIRES 2013-2018

Since 2013 NZM has been working with growers and researchers to develop an estimated breeding value (EBV) for footrot susceptibility. This EBV is a tool to select and breed from sheep that are genetically less susceptible to footrot. The breeding value has been developed and released through Sheep Genetics' fine wool EBV platform 'MERINOSELECT'.

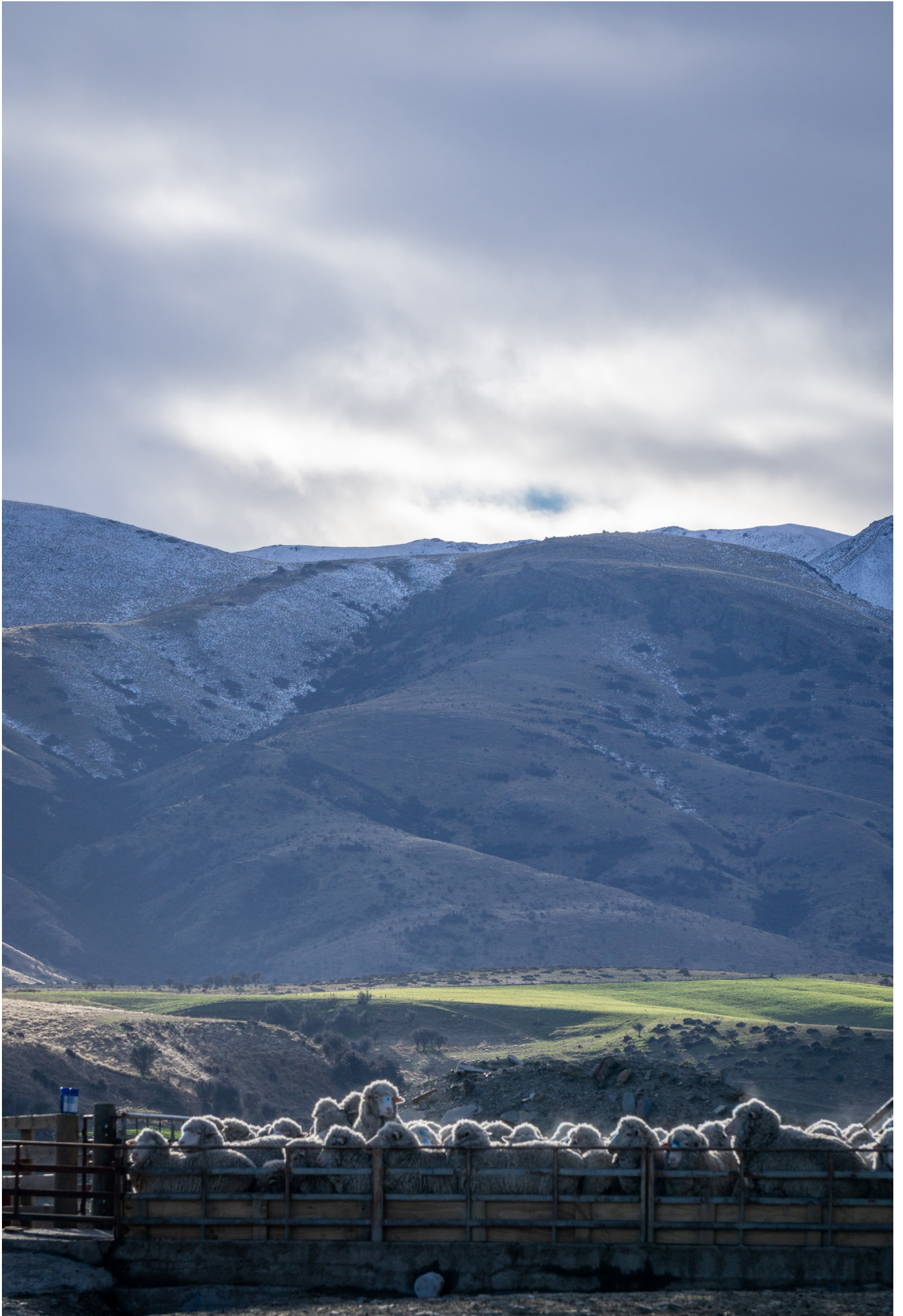
Having an EBV to actively breed for more resilient sheep is a significant milestone on the journey towards a footrot free future for the fine wool industry.

THINGS TO REMEMBER

- On Sheep Genetics the footrot trait is called 'FR'.
- The footrot trait is not correlated with any production traits, meaning using the breeding value won't affect other traits you've worked hard to select for or against.
- Susceptibility to footrot is moderately heritable (approximately 25%) meaning that a substantial proportion of the trait variation is explained by genetics.
- The more negative a footrot BV, the more resistant the progeny of that animal are (i.e. the less likely the progeny of that animal are to succumb to footrot). For example, a ram with a footrot BV of -0.18 will have more genetic resistance to footrot than a ram with -0.05 , which is better than a ram with a footrot BV of 0.20 .
- There are many genes that control footrot – 21 of the 27 pairs of chromosomes in the sheep genome contain genes that influence footrot resistance. Therefore, a single gene test tells us very little about an animal's resistance to footrot, whereas an EBV utilises actual footrot susceptibility data, genomic data and parentage records which all contribute to the breeding value. The completeness of the data feeding into an EBV is reflected in its accuracy value.

- Within the CPT each year, where exposure to the environmental factors that contribute to footrot are the same for each sire's progeny, we see that some sires are more resistant, and some are more susceptible.
- Footrot resistance is present in all types of fine-wool sheep, and all studs have a spread of resistant and less resistant animals. A sire published here doesn't reflect that entire stud. Notice where a stud has entered multiple rams, there is typically variation between those rams, meaning that each stud can make progress towards footrot resistance by choosing rams with better footrot BVs.

2018 DROP SIRES	FR BV	ACCURACY
Anderson 140474	-0.04	95%
Benmore 170013	-0.15	90%
Cleardale M179/16	0.03	94%
Earnsclough 163788	-0.44	92%
Earnsclough 164146	-0.33	92%
Glen Orkney 150050	-0.20	95%
Ida Valley 160067	-0.55	92%
Isolation 150529	0.25	87%
Matakanui FAT076	-0.42	94%
Matarae 155057	0.08	92%
Melrose 160026	-0.22	91%
Merinotech 122281	0.18	92%
Middlehurst 150506	0.36	93%
Moutere 150426	-0.17	93%
Muller 160344	0.58	95%
Mumblebone 160418	0.29	92%
Nine Mile 160795	0.54	92%
NZM 110294 (Link Sire)	-0.31	96%
Southern Cross 160058	-0.10	96%
The Gums 160505	-0.13	93%
Trigger Vale 140477 (Link Sire)	0.39	95%
Trigger Vale 160095	0.13	86%



2017 DROP SIRES	FR BV	ACCURACY
Awapiri M28-15	0.06	63%
Benmore T19-16	-0.20	85%
Benmore T61-16	0.31	88%
Cleardale B43-15	0.39	94%
Earnsclough 144004	0.46	92%
Earnsclough 154534	-0.93	94%
Eskhead 158/12 (Link Sire)	0.73	91%
Glenloe 130114	-0.49	95%
Glenmore GM16-15	0.88	89%
Ida Valley Kev 41	-0.16	96%
Matakanui 140004	-0.32	95%
Matakanui 150035	-0.11	94%
Matangi 130148	0.23	93%
Matangi 130122	0.46	94%
Matauae 144070	0.56	92%
Melrose 150140	-0.67	85%
Middlehurst 150519	0.52	91%
Moojepin 140377	0.74	93%
Nine Mile 140095	0.16	96%
Nine Mile 150600	0.40	96%
NZM 160001	0.21	89%
NZM 160005	0.80	79%
NZM 110349 (Link Sire)	0.08	95%
Southern Cross 150328	-0.38	96%
Stonehenge AD33 - 150012	-0.15	91%
The Gums 150378	-0.80	94%
Trigger Vale 150758	0.32	95%

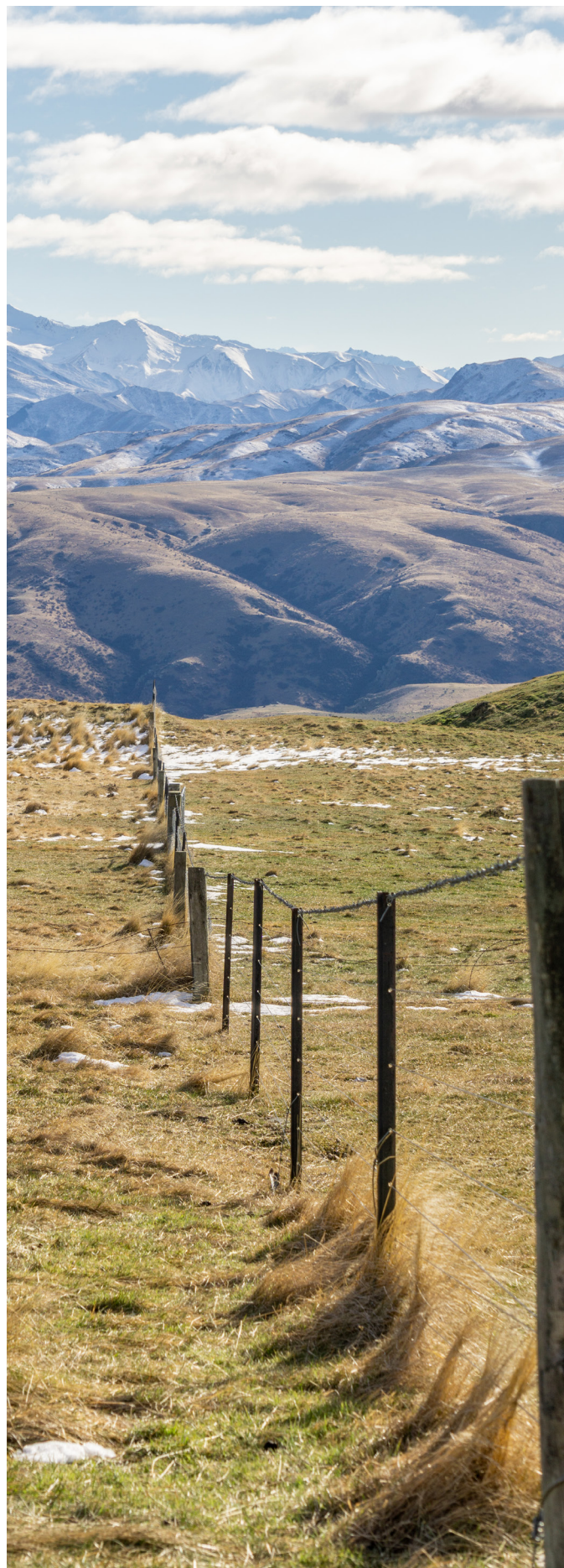
2016 DROP SIRES	FR BV	ACCURACY
Awapiri 140027	-0.18	70%
Benmore T19-15	0.22	78%
Benmore TC99-15	0.18	76%
Cleardale AB 97/14	0.31	93%
Cleardale L242/12	-0.27	94%
CPT 18	0.17	54%
CPT 45	0.13	83%
CPT 57	0.18	81%
CPT 80	0.10	83%
Earnsclough 131383	-0.10	88%
Glenloe 140045	-0.04	63%
Glenovis K110-13	-0.12	82%
Ida Valley 140049	-0.45	84%
Ida Valley 140501	-0.28	85%
Lockerbie 42/13	-0.19	63%
Longfield 20/14	0.19	80%
Longfield S206/14	-0.26	80%
Mallochvale K601-12	-0.50	87%
Matakanui F108/14	-0.12	77%
Matakanui F126/14	-0.11	79%
Maratae 099040	-0.66	92%
Melrose 9/14	-0.19	96%
Merinotech 088579 (Link Sire)	-0.31	94%
Middlehurst 150504	0.38	84%
Middlehurst 150607	0.57	82%
Moojepin 120652 (Link Sire)	0.41	96%
Moojepin 141692	0.27	83%
Muller WD27-14	0.96	96%
Mumblebone 130389	0.36	65%
Nine Mile 130019	0.52	85%
Nine Mile 130054	0.22	85%
NZM 110219 (Link Sire)	0.02	92%
NZM 110292 (Link Sire)	-0.28	90%
NZM 110294 (Link Sire)	-0.31	96%
NZM 110349 (Link Sire)	0.08	95%
NZM 110647 (Link Sire)	-0.01	92%
Otematata AD2-45	0.11	89%
Otematata AD3-28	-0.02	77%
Rokeby 2111/02	0.48	68%
Southern Cross 140230	0.25	90%
Southern Cross 140343	0.72	82%
Southern Cross 140440	0.49	95%
Strathblane 494-14	-0.28	77%
Trigger Vale 140477	0.39	95%
Wallaloo Park 140261	0.20	79%



2015 DROP SIRES	FR BV	ACCURACY
Armidale 111900	0.07	89%
Armidale 131528	0.35	85%
Benmore T29/13	-0.47	80%
Benmore T52/13	0.18	82%
Blairich 120671	0.04	89%
Cleardale D00016	0.30	93%
Cleardale S00536	-0.23	96%
Earnscleugh 134006	-0.04	90%
Eskhead 158/12 (Link Sire)	0.73	91%
Eudunda 902/10	-0.52	91%
Glenmore 090092	0.41	74%
Glenmore 90224	0.36	74%
Glenovis D242/07	-0.27	88%
Glentanner 11TW31	-0.11	82%
Glentanner 12NR19	-0.06	65%
Gray's Hills 120218	0.03	96%
Ida Valley 39/13	0.01	91%
Longfield 130281	0.50	85%
Malven Downs 0909	0.29	62%
Maryburn 39/13	0.28	77%
Maryburn 73/10	0.34	91%
Matakanui 44/13	-0.30	94%
Matakanui F63/13	-0.18	80%
Matangi 105/11	0.25	59%
Matangi 19/11	0.10	86%
Mataarae 099040	-0.66	92%
Mataarae 100271	-0.09	72%
Melrose 130398	-0.87	92%
Melrose 140094	-0.02	97%
Merinotech 122295	0.40	85%
Middlehurst 130203	0.38	82%
Middlehurst 130364	-0.12	81%
Muller D62/12	0.26	90%
Muller D82/12	0.22	90%
Nine Mile 130005	0.35	84%
Nine Mile 130047	0.49	84%
Nine Mile 140881	0.70	89%
Nokomai 110214	-0.61	92%
NZM 110210	0.06	78%
NZM 110219 (Link Sire)	0.02	92%
NZM 110292 (Link Sire)	-0.28	90%
NZM 110294 (Link Sire)	-0.31	96%
NZM 110349 (Link Sire)	0.08	95%
NZM 110500	-0.19	80%
NZM 110647 (Link Sire)	-0.01	92%
Roseville Park 090014	0.09	89%
Strathblane 120/13	-0.06	78%
The Gums 132034	0.50	92%
The Gums 132037	-0.32	92%

2014 DROP SIRES	FR BV	ACCURACY
Armidale 121938	0.10	82%
Awapiri 090025	0.30	73%
Benmore 12N952	0.01	82%
Blairich 110175	0.09	94%
Blairich 120310	-0.09	92%
Cleardale 11L130	0.06	87%
Cleardale 13AB15	0.38	89%
CPT 14	0.34	88%
Earnscleugh 95022	-0.26	90%
Glen Orkney 110138	0.35	84%
Glenmore 070403	-0.14	82%
Glenovis 12K214	-0.31	83%
Ida Valley 00Jacob63	-0.30	93%
Leahcim 123170	0.37	71%
Longfield 11EE18	0.28	84%
Maryburn 120073	-0.23	84%
Matakanui 110375	0.03	95%
Matakanui 12F236	-0.53	95%
Mataarae 070017	-0.20	67%
Melrose 100217	-0.73	91%
Middlehurst 120248	-0.05	85%
Middlehurst 120371	0.09	84%
Moojepin 090781 (Link Sire)	0.08	92%
Moojepin 100248	0.29	85%
Moojepin 120652 (Link Sire)	0.41	96%
Moutere 124660	0.84	86%
Muller 120A20	0.45	84%
Muller 12MD01	0.69	97%
Mumblebone 120431	0.79	84%
Nerstane 080290	-0.06	89%
Nine Mile 120455	0.34	84%
NZM 110183	-0.07	82%
NZM 110195	0.09	84%
NZM 110196	-0.23	84%
NZM 110294 (Link Sire)	-0.31	96%
NZM 110365	-0.34	84%
NZM 110492	-0.33	81%
NZM 110662	-0.41	74%
Stonehenge 110035	-0.25	79%
Strathblane 110654	-0.16	85%

2013 DROP SIRES	FR BV	ACCURACY
Armidale 110631	-0.12	86%
Armidale 111735	0.70	88%
Awapiri 100085	0.47	80%
Benmore 091053	0.40	86%
Benmore 100969	0.05	82%
Black Forest 080572	0.63	86%
Blairich 110106	-0.20	86%
Cleardale 100127	0.07	93%
CPT 4	0.40	88%
Earnsclough 083006	-0.46	88%
Earnsclough 114323	-0.23	90%
Glen Orkney 100200	0.50	90%
Glen Orkney 110184	0.21	89%
Glenloe 092888	-0.71	88%
Glenmore 020016	0.63	85%
Glentanner 08TW20	-0.05	86%
Glentanner 10UM18	-0.07	86%
Grays Hills 100506	-0.14	97%
Grays Hills 110149	-0.27	86%
Koonwarra 3JSN14	0.13	82%
Longfield 110711	-0.24	84%
Melrose 080361	-0.67	93%
Merinotech 088579 (Link Sire)	-0.31	94%
Middlehurst 100103	0.28	84%
Moojepin 090781 (Link Sire)	0.08	92%
Moojepin 110530	0.39	94%
Moojepin 110669	0.52	91%
Moutere 082251	-0.09	89%
Muller 090088	0.22	84%
Muller 100002	-0.48	84%
Nine Mile 090015	0.81	89%
Nine Mile 110189	0.55	88%
Nine Mile 110196	0.63	88%
Tara Park 000685	0.18	86%
The Glen 110065	0.26	88%
The Glen 110207	0.10	89%
The Gums 101861	0.46	87%
The Gums 110207	0.53	78%
The Gums 110703	0.36	87%
Trigger Vale 110839	0.20	83%



If you have any questions about this data, or the footrot breeding value please contact:

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