

With the support of



In conjunction with











TABLE OF CONTENTS

Introduction	2
CPT Growth Index	3
CPT Meat Value Index	4
CPT Meat & Growth Index	5
Weaning Weight BV (kg)	6
WormFec BV (%)	7
Dressing Percentage BV	8
EMA BV	9
Meat Colour BV (a*)	10
Fat Colour BV (b*)	11
pH BV	12
Top 20 Terminal Rams	13
Top 20 Dual Purpose Rams	14
Animal Management Procedures	15
Future of the CPT	16

KEY:

Sites: A = Ashley Dene Years: 02 = 2002/2003 season

W = Woodlands 03 = 2003/2004 season P = Poukawa 04 = 2004/2005 season 05 = 2005/2006 season

EMA Eye Muscle Area
FEC Faecal Egg Count
BV Breeding value

The results presented in this booklet comprise the top 20 terminal and top 20 dual purpose rams for each index or trait. The CPT Growth Index is based on weaning weight and carcass weight breeding values. The CPT Meat Value Index is based on the breeding values for weight of meat in the leg, loin and lean as measured by VIAscan. The CPT Meat and Growth Index is the combination of the Meat and Growth indexes.

The information in this booklet is not to be reproduced or copied in whole or in part without the written consent of Meat & Wool New Zealand.

All due care has been taken in preparing this information. However, Meat & Wool New Zealand Limited does not guarantee its accuracy, and opinions expressed can change without notice. To the extent possible Meat & Wool New Zealand's liability is excluded, and persons acting in reliance on the information do so at their own risk.

For information relating to the Meat & Wool New Zealand Central Progeny Test, contact:

Dr Andy Bray Meat & Wool New Zealand Level 13, PWC Tower 113-119 The Terrace P O Box 121 Wellington 6015

INTRODUCTION

Background

A progeny test is used to "prove" the genetics of a ram by comparing how his progeny perform under the same environmental conditions relative to progeny from other rams. Rams can be compared across different flocks through use of reference sires that create genetic links between flocks. However, there are good reasons to run a progeny test at one location, usually termed a "central progeny test" (CPT). Reasons include facilitating comparisons of rams that would not normally be made in industry, and the use of novel or expensive measurement methods.

Objectives

The CPT was set up to:

- examine how much industry rams varied in carcass merit, using a sophisticated approach to carcass assessment (i.e. VIAscan)
- demonstrate to industry the extent to which rams varied in the value they could add to farm returns
- improve our understanding of the genetic control of carcass merit and its relationship with other production traits
- foster links between ram breeding groups

The CPT was not set up as a breed comparison, but rather as a RAM comparison. It has focused on identifying the best genetics regardless of breed. Breed comparisons require testing many randomly selected sires per breed, and with few progeny per sire. The CPT has used a small number of sires, with more progeny per sire, from as many breeds as possible to improve genetic linkage within the New Zealand sheep industry.

Genetic links between breeding groups established through the CPT have been used in large scale evaluations performed across flocks and across breeds by SIL. These are the "ACE" (Advanced Central Evaluation) evaluations. CPT data has provided the links necessary for this to be undertaken.

History of the CPT

In 2002, the "Alliance CPT" was established at Woodlands, in Southland, with significant funding from the Alliance Group and the collaboration of AgResearch, SIL and Abacus Biotech. Terminal Sire and Dual Purpose rams were sourced from industry and mated to Coopworth or Coopworth-cross ewes. Lambs were assessed for growth rate and carcass merit, making use of Alliance's VIAscan technology for carcass assessment.

In 2003 a second site was established at Ashley Dene in collaboration with Lincoln University. Rams from industry were mated to predominantly Coopworth ewes at both sites. Lambs were assessed for growth rate and carcass merit.

In 2004, rams were mated to ewes at both sites. However, Dual Purpose sires were mated to more ewes. This was to enable reasonable numbers of female progeny to be retained for assessment of maternal traits. Surplus females and all male lambs were assessed for growth rate and carcass merit. Funding for the work with female progeny was provided by Meat & Wool New Zealand.

In 2005 a third site was established at Poukawa, in the Hawkes Bay with On-Farm Research and another round of matings were carried out as specified for 2004.

For 2006, matings have being carried out as specified for 2004. Funding is now primarily from Meat & Wool New Zealand, and it is now known as the M&WNZ CPT. The results in the following tables include data from all rams evaluated to date. The results are presented as three indexes (Growth, Meat and a combined Growth and Meat index). Individual breeding values are presented for traits of interest.

CPT GROWTH INDEX

<u>Terminal:</u> Range: \$69.10 to \$73.14

TAG	Flock	Breed	Sites	Progeny	Growth BV	Rank
*128/97	Punchbowl	Suffolk	W03	38	\$73.14	1
4012/99	Bilberry Oaks	Hampshire	W02 W03	52	\$73.10	2
514/00	Linton	Poll Dorset	W04	46	\$72.31	3
25/02	Glenaven	Hampshire	W04	40	\$72.16	4
767/99	Darenal	Dorset Down	A03	14	\$72.15	5
120/00	Glendhu	Dorset Down	W03	34	\$72.07	6
106/99	Ohio	Poll Dorset	W02	46	\$72.02	7
25/99	Tyanee	Suffolk	A04 P05	82	\$71.88	8
35/01	Glengarry	Poll Dorset	A03 W03	39	\$71.88	9
*419/96	Punchbowl	Suffolk	W02	13	\$71.88	10
33/02	RBL Rissington	Primera	W04	27	\$71.78	11
299/01	Ohio	Poll Dorset	A04	37	\$71.74	12
X0050/87	Sheepac	Oxford	W03	31	\$71.62	13
911/99	Murray Downs	Texel	W03	32	\$71.59	14
11/03	Goldstream	Suffolk	P05	24	\$71.56	15
211/98	Kurralea	Poll Dorset	W02	28	\$71.56	16
430/03	Glengarry	Poll Dorset	A05 P05 W05	124	\$71.54	17
400/00	Brandes Burton	Texel	W02 W04	63	\$71.47	18
T533/01	Wharetoa	Composite	W02 W03	57	\$71.43	19
77/95	Douglas Downs	Dorset Horn	W02 W04	75	\$71.20	20

<u>Dual Purpose:</u> Range: \$66.75 to \$70.57

TAG	Flock	Breed	Sites	Progeny	Growth BV	Rank
232/01	TRIGG	Romney	W03	20	\$70.57	1
2165/97	Wairere	Romney	W02/03 A04	88	\$70.45	2
426/99	Mt Guardian	Perendale	W03	22	\$70.23	3
300/03	MNCC	Coopworth	W05	27	\$69.98	4
55/01	Bonnieview	Perendale	W05	20	\$69.97	5
493/00	Hazeldale	Perendale	W03	23	\$69.76	6
5093/99	Meadowslea	Romney	A03	22	\$69.75	7
2135/99	Rosedale	Growbulk	W03	30	\$69.73	8
781/00	Shoreford	Romney	W03	30	\$69.66	9
132/01	Kelso	Composite	W03	31	\$69.57	10
835/01	Poukawa	Composite	P05	85	\$69.51	11
531/98	Wharetoa	Coopworth	W03	29	\$69.46	12
97/02	Raywell	Borderdale	A0/04	52	\$69.42	13
172/02	Glen Rannoch	Perendale	A04	34	\$69.40	14
833/02	Tamlet	Coopworth	W05	25	\$69.33	15
1235/00	Strathblane	Corriedale	A04	30	\$69.30	16
1035/02	Newhaven	Perendale	W04	32	\$69.27	17
435/98	Kelso	Composite	W02	31	\$69.19	18
88/02	TRIGG	Romney	W05	25	\$68.98	19
5828/02	Waihora	Romney	W04	52	\$68.81	20

^{*} This index differs from the CPT Days to Kill Index used in previous years. The CPT Growth Index is a terminal sire growth index based on weaning and carcass weight breeding values.

* Average is an 18kg Y grade carcase valued at \$70 per head

CPT MEAT VALUE INDEX

<u>Terminal:</u> Range: \$67.96 to \$73.53

TAG	Flock	Breed	Sites	Progeny	Meat Value BV	Rank
299/00	Waikite	Texel	W02/03	59	\$73.53	1
110/03	Murray Downs	Texel	W05	38	\$72.58	2
XA2/99	The Burn	Texel	W02	23	\$72.48	3
911/99	Murray Downs	Texel	W03	32	\$72.12	4
299/01	Ohio	Poll Dorset	A04	37	\$72.05	5
400/00	Brandes Burton	Texel	W02/04	63	\$72.03	6
114/03	Kepler Supreme	Composite	A05	36	\$72.00	7
44/02	WTD	Texel	P05	49	\$71.79	8
1296/03	Mount Linton	Texel Cross	W05	40	\$71.66	9
77/95	Douglas Downs	Dorset Horn	W02/04	75	\$71.53	10
021/01	Broken Hut	Texel	A03	33	\$71.47	11
T369/02	Wharetoa	Composite	A03	30	\$71.35	12
70/01	Torresdale	Suffolk	W05	40	\$71.26	13
*128/97	Punchbowl	Suffolk	W03	38	\$71.20	14
5258/01	Mount Linton	Texel	W03	30	\$71.04	15
154/99	Ivadene	Poll Dorset	W02	29	\$70.95	16
165/00	Torresdale	Suffolk	W02	30	\$70.90	17
106/99	Ohio	Poll Dorset	W02	46	\$70.84	18
2002/02	Mount Linton	Texel Cross	A04	34	\$70.79	19
11/03	Goldstream	Suffolk	P05	24	\$70.77	20

<u>Dual Purpose:</u> Range: \$67.45 to \$70.90

TAG	Flock	Breed	Sites	Progeny	Meat Value BV	Rank
88/02	TRIGG	Romney	W05	25	\$70.90	1
34/01	Twin Farm	TEFRom	W03	33	\$70.62	2
132/01	Kelso	Composite	W03	31	\$70.52	3
435/98	Kelso	Composite	W02	31	\$70.36	4
211/99	Blackdale	Coopworth	W03	30	\$70.36	5
11/01	Little River	Cheviot	A03 W03	64	\$70.25	6
781/00	Shoreford	Romney	W03	30	\$70.24	7
138/01	Edale	Growbulk	A03	38	\$70.23	8
85/00	Tahakita	Coopworth	W04 A04	76	\$69.95	9
835/01	Poukawa	Composite	P05	85	\$69.90	10
107/97	Strathblane	Corriedale	A03	15	\$69.90	11
97/02	Raywell	Borderdale	A03/04	52	\$69.78	12
JL1695/1	WRIG	Romney	P05	37	\$69.76	13
55/01	Bonnieview	Perendale	W05	20	\$69.71	14
774/02	Flockton	Perendale	A04	38	\$69.70	15
1127/95	Awareka	Romney	W03	19	\$69.68	16
407/03	Hiwinui	Romney	P05	34	\$69.66	17
531/98	Wharetoa	Coopworth	W03	29	\$69.65	18
458/01	View Hill	Romney	W03	30	\$69.45	19
147/01	Tresco	Romney	W05	28	\$69.38	20

^{*} Average is an 18kg Y grade carcase valued at \$70 per head

^{*} The relative value for meat from the loin was 4x that of meat from the shoulder and 2x that of meat from the hindleg

CPT MEAT & GROWTH INDEX

<u>Terminal:</u> Range: \$68.91 to \$74.62

TAG	Flock	Breed	Sites	Progeny	Meat & Growth	Rank
299/00	Waikite	Texel	W02/03	59	\$74.62	1
*128/97	Punchbowl	Suffolk	W03	38	\$74.35	2
299/01	Ohio	Poll Dorset	A04	37	\$73.78	3
911/99	Murray Downs	Texel	W03	32	\$73.71	4
400/00	Brandes Burton	Texel	W02/04	63	\$73.50	5
4012/99	Bilberry Oaks	Hampshire	W02/03	52	\$72.97	6
106/99	Ohio	Poll Dorset	W02	46	\$72.87	7
77/95	Douglas Downs	Dorset Horn	W02/04	75	\$72.74	8
1296/03	Mount Linton	Texel Cross	W05	40	\$72.73	9
110/03	Murray Downs	Texel	W05	38	\$72.69	10
44/02	WTD	Texel	P05	49	\$72.59	11
33/02	RBL Rissington	Primera	W04	27	\$72.54	12
514/00	Linton	Poll Dorset	W04	46	\$72.48	13
T369/02	Wharetoa	Composite	A03	30	\$72.36	14
11/03	Goldstream	Suffolk	P05	24	\$72.33	15
25/99	Tyanee	Suffolk	A04 P05	82	\$72.17	16
*419/96	Punchbowl	Suffolk	W02	13	\$72.15	17
T533/01	Wharetoa	Composite	W02/03	57	\$72.12	18
70/01	Torresdale	Suffolk	W05	40	\$72.11	19
021/01	Broken Hut	Texel	A03	33	\$72.10	20

Dual Purpose: Range: \$65.08 to \$70.09

TAG	Flock	Breed	Sites	Progeny	Meat & Growth	Rank
132/01	Kelso	Composite	W03	31	\$70.09	1
781/00	Shoreford	Romney	W03	30	\$69.90	2
88/02	TRIGG	Romney	W05	25	\$69.88	3
232/01	TRIGG	Romney	W03	20	\$69.78	4
55/01	Bonnieview	Perendale	W05	20	\$69.68	5
435/98	Kelso	Composite	W02	31	\$69.55	6
835/01	Poukawa	Composite	P05	85	\$69.41	7
97/02	Raywell	Borderdale	A03/04	52	\$69.20	8
531/98	Wharetoa	Coopworth	W03	29	\$69.11	9
34/01	Twin Farm	TEFRom	W03	33	\$68.88	10
138/01	Edale	Growbulk	A03	38	\$68.86	11
172/02	Glen Rannoch	Perendale	A04	34	\$68.71	12
300/03	MNCC	Coopworth	W05	27	\$68.69	13
5093/99	Meadowslea	Romney	A03	22	\$68.65	14
85/00	Tahakita	Coopworth	W04 A04	76	\$68.64	15
2165/97	Wairere	Romney	W02/03 A04	88	\$68.63	16
1035/02	Newhaven	Perendale	W04	32	\$68.59	17
11/01	Little River	Cheviot	A03 W03	64	\$68.58	18
107/97	Strathblane	Corriedale	A03	15	\$68.53	19
493/00	Hazeldale	Perendale	W03	23	\$68.50	20

^{*} Average is an 18kg Y grade carcase valued at \$70 per head

WEANING WEIGHT BV (KG)

Terminal: Range: 23.03 to 28.67

TAG	Flock	Breed	Sites	Progeny	WWT BV	Rank
*128/97	Punchbowl	Suffolk	W03	38	28.67	1
4012/99	Bilberry Oaks	Hampshire	W02/03	52	28.58	2
X0050/87	Sheepac	Oxford	W03	31	28.15	3
*419/96	Punchbowl	Suffolk	W02	13	28.05	4
514/00	Linton	Poll Dorset	W04	46	27.85	5
767/99	Darenal	Dorset Down	A03	14	27.70	6
25/02	Glenaven	Hampshire	W04	40	27.63	7
25/99	Tyanee	Suffolk	A04 P05	82	27.47	8
106/99	Ohio	Poll Dorset	W02	46	27.10	9
35/01	Glengarry	Poll Dorset	A03 W03	39	27.05	10
51/00	Trackly	Dorset Down	W02	24	27.02	11
120/00	Glendhu	Dorset Down	W03	34	26.94	12
33/02	RBL Rissington	Primera	W04	27	26.87	13
77/95	Douglas Downs	Dorset Horn	W02/04	75	26.79	14
211/98	Kurralea	Poll Dorset	W02	28	26.72	15
41/00	Tasvic Downs	Southdown	W02	46	26.61	16
11/03	Goldstream	Suffolk	P05	24	26.49	17
9/03	Pahiwi	Suffolk	P05	109	26.47	18
430/03	Glengarry	Poll Dorset	A05 P05 W05	124	26.33	19
1296/03	Mount Linton	Texel Cross	W05	40	26.26	20

Dual Purpose: Range: 21.38 to 26.63

TAG	Flock	Breed	Sites	Progeny	WWT BV	Rank
232/01	TRIGG	Romney	W03	20	26.63	1
781/00	Shoreford	Romney	W03	30	26.01	2
531/98	Wharetoa	Coopworth	W03	29	25.88	3
2165/97	Wairere	Romney	W02/03 A04	88	25.81	4
55/01	Bonnieview	Perendale	W05	20	25.20	5
426/99	Mt Guardian	Perendale	W03	22	25.03	6
97/02	Raywell	Borderdale	A03/04	52	24.94	7
5093/99	Meadowslea	Romney	A03	22	24.91	8
147/01	Tresco	Romney	W05	28	24.83	9
833/02	Tamlet	Coopworth	W05	25	24.73	10
88/02	TRIGG	Romney	W05	25	24.65	11
2135/99	Rosedale	Growbulk	W03	30	24.61	12
300/03	MNCC	Coopworth	W05	27	24.60	13
4014/96	Waihora	Romney	W04	23	24.59	14
493/00	Hazeldale	Perendale	W03	23	24.52	15
107/97	Strathblane	Corriedale	A03	15	24.44	16
435/98	Kelso	Composite	W02	31	24.44	17
1235/00	Strathblane	Corriedale	A04	30	24.42	18
835/01	Poukawa	Composite	P05	85	24.40	19
1127/95	Awareka	Romney	W03	19	24.35	20

^{*} Average weaning weight is 25kg

WORMFEC BV (%)

<u>Terminal:</u> Range: 79.30 to -36.11

TAG	Flock	Breed	Sites	Progeny	WormFEC BV	Rank
E-140/00	Turnberry	Composite	W02	21	-36.11	1
299/00	Waikite	Texel	W02/03	59	-35.27	2
167/02	MEBA	Texel	W04	51	-29.42	3
61/97	Oringi	Oxford Down	A04	38	-25.36	4
XA2/99	The Burn	Texel	W02	23	-20.84	5
X0050/87	Sheepac	Oxford	W03	27	-20.62	6
110/03	Murray Downs	Texel	W05	38	-19.81	7
25/99	Tyanee	Suffolk	A04 P05	82	-15.04	8
106/99	Ohio	Poll Dorset	W02	46	-12.36	9
77/95	Douglas Downs	Dorset Horn	W02/04	75	-11.56	10
78/02	Lincoln	Dorset Down	W04	30	-10.98	11
62/02	Silverstream	Dorset Down	W05	30	-10.93	12
T533/01	Wharetoa	Composite	W02/03	56	-10.62	13
911/99	Murray Downs	Texel	W03	31	-9.25	14
19/03	Tasvic Downs	Southdown	P05	60	-8.25	15
120/00	Glendhu	Dorset Down	W03	33	-7.55	16
57/99	Charleston	Southdown	W02	21	-6.38	17
154/99	Ivadene	Poll Dorset	W02	27	-4.48	18
1144/99	Teviotdale	Hampshire	W02	34	-3.38	19
400/00	Brandes Burton	Texel	W02/04	63	-2.82	20

Dual Purpose: Range: 78.79 to -42.13

TAG	Flock	Breed	Sites	Progeny	WormFEC BV	Rank
4014/96	Waihora	Romney	W04	22	-42.13	1
1127/95	Awareka	Romney	W03	19	-40.12	2
722/03	Rose Mains	Perendale	W05	36	-37.34	3
1035/02	Newhaven	Perendale	W04	32	-32.26	4
706/00	Lincoln	Coopworth	A03/04/05 W03/05	157	-30.44	5
664/98	ARDG Elite	Romney	W03	16	-29.81	6
147/01	Tresco	Romney	W05	28	-28.52	7
850/00	Hillcrest	Perendale	W03	30	-27.09	8
132/01	Kelso	Composite	W03	31	-24.95	9
300/03	MNCC	Coopworth	W05	27	-22.87	10
5093/99	Meadowslea	Romney	A03	21	-22.57	11
1235/00	Strathblane	Corriedale	A04	30	-19.41	12
435/98	Kelso	Composite	W02	31	-18.43	13
407/03	Hiwinui	Romney	P05	34	-17.98	14
2135/99	Rosedale	Growbulk	W03	30	-15.51	15
2165/97	Wairere	Romney	W02/03 A04	86	-12.01	16
835/01	Poukawa	Composite	P05	85	-7.37	17
JL1695/1	WRIG	Romney	P05	37	-6.59	18
HG552/02	Clifton	Corriedale	A05	57	-4.41	19
11/01	Little River	Cheviot	A03 W03	60	-3.96	20

^{*} Breeding values expressed as a percentage reduction in eggs shed

DRESSING PERCENTAGE BV (%)

Terminal: Range: 43.6 to 47.9

TAG	Flock	Breed	Sites	Progeny	Dressing % BV	Rank
167/02	MEBA	Texel	W04	50	47.9	1
299/00	Waikite	Texel	W02/03	59	47.3	2
19/03	Tasvic Downs	Southdown	P05	60	46.9	3
263/03	Summerfield	South Suffolk	P05	79	46.9	4
XA2/99	The Burn	Texel	W02	23	46.8	5
911/99	Murray Downs	Texel	W03	32	46.8	6
110/03	Murray Downs	Texel	W05	38	46.8	7
400/00	Brandes Burton	Texel	W02/04	63	46.7	8
26/00	Lincoln	Dorset Down	A03	33	46.4	9
226/00	Logan	South Suffolk	A03	31	46.4	10
78/02	Lincoln	Dorset Down	W04	30	46.3	11
44/02	WTD	Texel	P05	49	46.1	12
31/02	Kaya Dorper	Dorper	A05	57	46.1	13
5258/01	Mount Linton	Texel	W03	30	45.8	14
299/01	Ohio	Poll Dorset	A04	37	45.8	15
T369/02	Wharetoa	Composite	A03	30	45.8	16
E-140/00	Turnberry	Composite	W02	21	45.7	17
430/03	Glengarry	Poll Dorset	A05 P05 W05	124	45.7	18
T533/01	Wharetoa	Composite	W02/03	57	45.7	19
11/03	Goldstream	Suffolk	P05	24	45.6	20

Dual Purpose: Range: 42.8 to 46.7

TAG	Flock	Breed	Sites	Progeny	Dressing % BV	Rank
132/01	Kelso	Composite	W03	31	46.7	1
11/01	Little River	Cheviot	A03 W03	64	46.4	2
JL1695/1	WRIG	Romney	P05	37	46.1	3
300/03	MNCC	Coopworth	W05	27	45.7	4
172/02	Glen Rannoch	Perendale	A04	34	45.6	5
1035/02	Newhaven	Perendale	W04	32	45.6	6
850/00	Hillcrest	Perendale	W03	30	45.6	7
138/01	Edale	Growbulk	A03	38	45.5	8
774/02	Flockton	Perendale	A04	38	45.4	9
2135/99	Rosedale	Growbulk	W03	30	45.2	10
706/00	Lincoln	Coopworth	A03/04/05 W03/05	157	45.1	11
HG552/02	Clifton	Corriedale	A05	57	45.1	12
34/01	Twin Farm	TEFRom	W03	33	45.1	13
85/00	Tahakita	Coopworth	W04 A04	76	45.0	14
407/03	Hiwinui	Romney	P05	34	44.9	15
664/98	ARDG Elite	Romney	W03	16	44.8	16
835/01	Poukawa	Composite	P05	85	44.8	17
426/99	Mt Guardian	Perendale	W03	22	44.6	18
493/00	Hazeldale	Perendale	W03	23	44.6	19
435/98	Kelso	Composite	W02	31	44.6	20

^{*} Average dressing percentage is 45%

EMA BV (cm²)

Terminal: Range: 10.73 to 15.23

TAG	Flock	Breed	Sites	Progeny	EMA BV	Rank
299/00	Waikite	Texel	W02 W03	59	15.23	1
299/01	Ohio	Poll Dorset	A04	37	14.97	2
114/03	Kepler Supreme	Composite	A05	36	14.90	3
2002/02	Mount Linton	Texel Cross	A04	34	14.65	4
106/99	Ohio	Poll Dorset	W02	46	14.18	5
021/01	Broken Hut	Texel	A03	33	13.88	6
33/02	RBL Rissington	Primera	W04	27	13.72	7
77/95	Douglas Downs	Dorset Horn	W02 W04	75	13.60	8
430/03	Glengarry	Poll Dorset	A05 P05 W05	124	13.49	9
19/03	Tasvic Downs	Southdown	P05	60	13.43	10
110/03	Murray Downs	Texel	W05	38	13.37	11
T533/01	Wharetoa	Composite	W02 W03	57	13.35	12
XA2/99	The Burn	Texel	W02	23	13.23	13
*128/97	Punchbowl	Suffolk	W03	38	13.22	14
78/02	Lincoln	Dorset Down	W04	30	13.18	15
400/00	Brandes Burton	Texel	W02 W04	63	13.09	16
211/98	Kurralea	Poll Dorset	W02	28	13.05	17
154/99	Ivadene	Poll Dorset	W02	29	13.04	18
9/03	Pahiwi	Suffolk	P05	109	12.96	19
263/03	Summerfield	South Suffolk	P05	79	12.91	20

Dual Purpose: Range: 9.49 to 12.92

TAG	Flock	Breed	Sites	Progeny	EMA BV	Rank
138/01	Edale	Growbulk	A03	38	12.92	1
722/03	Rose Mains	Perendale	W05	36	12.62	2
1127/95	Awareka	Romney	W03	19	12.62	3
107/97	Strathblane	Corriedale	A03	15	12.57	4
85/00	Tahakita	Coopworth	W04 A04	76	12.23	5
426/99	Mt Guardian	Perendale	W03	22	12.21	6
300/03	MNCC	Coopworth	W05	27	12.20	7
11/01	Little River	Cheviot	A03 W03	64	12.10	8
833/02	Tamlet	Coopworth	W05	25	12.07	9
435/98	Kelso	Composite	W02	31	12.01	10
JL1695/1	WRIG	Romney	P05	37	11.99	11
850/00	Hillcrest	Perendale	W03	30	11.94	12
55/01	Bonnieview	Perendale	W05	20	11.91	13
781/00	Shoreford	Romney	W03	30	11.83	14
664/98	ARDG Elite	Romney	W03	16	11.72	15
2165/97	Wairere	Romney	W02/03 A04	88	11.58	16
531/98	Wharetoa	Coopworth	W03	29	11.49	17
835/01	Poukawa	Composite	P05	85	11.42	18
4014/96	Waihora	Romney	W04	23	11.42	19
211/99	Blackdale	Coopworth	W03	30	11.37	20

^{*} Average EMA is 12 cm²

MEAT COLOUR BV (a*)

Terminal: Range: 17.80 to 21.08

TAG	Flock	Breed	Sites	Progeny	Meat Colour BV	Rank
T369/02	Wharetoa	Composite	A03	30	21.08	1
41/00	Tasvic Downs	Southdown	W02	46	20.96	2
5258/01	Mount Linton	Texel	W03	30	20.70	3
19/03	Tasvic Downs	Southdown	P05	60	20.69	4
767/99	Darenal	Dorset Down	A03	14	20.68	5
9/03	Pahiwi	Suffolk	P05	109	20.68	6
1144/99	Teviotdale	Hampshire	W02	34	20.67	7
57/99	Charleston	Southdown	W02	22	20.66	8
77/02	Mapua	Southdown	A04	54	20.58	9
11/03	Goldstream	Suffolk	P05	24	20.58	10
231/97	Bankhead	Southdown	A05	51	20.46	11
021/01	Broken Hut	Texel	A03	33	20.43	12
376/03	Douglas Downs	Dorset Horn	W05	28	20.34	13
33/02	RBL Rissington	Primera	W04	27	20.22	14
167/02	MEBA	Texel	W04	50	20.20	15
U33/97	Mornish	Suffolk	W02	17	20.15	16
400/00	Brandes Burton	Texel	W02/04	63	20.11	17
26/00	Lincoln	Dorset Down	A03	33	20.04	18
2002/02	Mount Linton	Texel Cross	A04	34	19.98	19
T533/01	Wharetoa	Composite	W02/03	57	19.96	20

Dual Purpose: Range: 18.38 to 21.99

TAG	Flock	Breed	Sites	Progeny	Meat Colour BV	Rank
JL1695/1	WRIG	Romney	P05	37	21.99	1
1832/02	Awareka	Romney	W04 A04	75	21.59	2
88/02	TRIGG	Romney	W05	25	21.49	3
HG552/02	Clifton	Corriedale	A05	57	21.25	4
1127/95	Awareka	Romney	W03	19	21.15	5
781/00	Shoreford	Romney	W03	30	21.01	6
107/97	Strathblane	Corriedale	A03	15	20.98	7
1035/02	Newhaven	Perendale	W04	32	20.94	8
422/00	Wattlebank	Corriedale	A04/05	87	20.87	9
493/00	Hazeldale	Perendale	W03	23	20.86	10
1235/00	Strathblane	Corriedale	A04	30	20.77	11
458/01	View Hill	Romney	W03	30	20.64	12
147/01	Tresco	Romney	W05	28	20.64	13
4014/96	Waihora	Romney	W04	23	20.55	14
407/03	Hiwinui	Romney	P05	34	20.55	15
172/02	Glen Rannoch	Perendale	A04	34	20.54	16
5828/02	Waihora	Romney	W04	52	20.53	17
531/98	Wharetoa	Coopworth	W03	29	20.51	18
97/02	Raywell	Borderdale	A03/04	52	20.51	19
722/03	Rose Mains	Perendale	W05	36	20.49	20

^{*} Average meat colour (a*; high values are red and low values are brown) *Mean = 20

FAT COLOUR BV (b*)

Terminal: Range: 14.19 to 8.49

TAG	Flock	Breed	Sites	Progeny	Fat Colour BV	Rank
31/02	Kaya Dorper	Dorper	A05	57	8.49	1
X0050/87	Sheepac	Oxford	W03	31	8.89	2
11/03	Goldstream	Suffolk	P05	24	9.15	3
E-140/00	Turnberry	Composite	W02	21	9.31	4
T369/02	Wharetoa	Composite	A03	30	9.55	5
154/99	Ivadene	Poll Dorset	W02	29	9.57	6
1144/99	Teviotdale	Hampshire	W02	34	9.70	7
1296/03	Mount Linton	Texel Cross	W05	40	9.76	8
70/01	Torresdale	Suffolk	W05	40	9.78	9
430/03	Glengarry	Poll Dorset	A05 P05 W05	124	9.80	10
514/00	Linton	Poll Dorset	W04	46	9.94	11
61/97	Oringi	Oxford Down	A04	38	10.02	12
*128/97	Punchbowl	Suffolk	W03	38	10.10	13
4012/99	Bilberry Oaks	Hampshire	W02/03	52	10.10	14
106/99	Ohio	Poll Dorset	W02	46	10.14	15
021/01	Broken Hut	Texel	A03	33	10.27	16
XA2/99	The Burn	Texel	W02	23	10.30	17
299/01	Ohio	Poll Dorset	A04	37	10.31	18
19/03	Tasvic Downs	Southdown	P05	60	10.33	19
44/02	WTD	Texel	P05	49	10.43	20

<u>Dual Purpose:</u> Range: 17.62 to 9.35

TAG	Flock	Breed	Sites	Progeny	Fat Colour BV	Rank
JL1695/1	WRIG	Romney	P05	37	9.35	1
1235/00	Strathblane	Corriedale	A04	30	9.43	2
107/97	Strathblane	Corriedale	A03	15	9.99	3
313/01	Valley	Coopworth	W04	36	10.08	4
34/01	Twin Farm	TEFRom	W03	33	10.11	5
55/01	Bonnieview	Perendale	W05	20	10.20	6
88/02	TRIGG	Romney	W05	25	10.37	7
774/02	Flockton	Perendale	A04	38	10.44	8
138/01	Edale	Growbulk	A03	38	10.59	9
1035/02	Newhaven	Perendale	W04	32	10.67	10
300/03	MNCC	Coopworth	W05	27	10.69	11
422/00	Wattlebank	Corriedale	A04/05	87	11.02	12
435/98	Kelso	Composite	W02	31	11.29	13
211/99	Blackdale	Coopworth	W03	30	11.31	14
232/01	TRIGG	Romney	W03	20	11.31	15
172/02	Glen Rannoch	Perendale	A04	34	11.33	16
706/00	Lincoln	Coopworth	A03/04/05 W03/05	157	11.46	17
132/01	Kelso	Composite	W03	31	11.57	18
664/98	ARDG Elite	Romney	W03	16	11.62	19
781/00	Shoreford	Romney	W03	30	11.80	20

^{*} Average fat colour (b*; high values are yellow) *Mean = 11.5

PHBV

Terminal: Range: 5.71 to 5.55

TAG	Flock	Breed	Sites	Progeny	pH BV	Rank
9/03	Pahiwi	Suffolk	P05	109	5.55	1
77/02	Mapua	Southdown	A04	54	5.55	2
19/03	Tasvic Downs	Southdown	P05	60	5.56	3
2002/02	Mount Linton	Texel Cross	A04	34	5.56	4
376/03	Douglas Downs	Dorset Horn	W05	28	5.56	5
T369/02	Wharetoa	Composite	A03	30	5.56	6
T533/01	Wharetoa	Composite	W02/03	57	5.56	7
167/02	MEBA	Texel	W04	50	5.57	8
021/01	Broken Hut	Texel	A03	33	5.57	9
106/99	Ohio	Poll Dorset	W02	46	5.57	10
77/95	Douglas Downs	Dorset Horn	W02/04	75	5.57	11
41/00	Tasvic Downs	Southdown	W02	46	5.57	12
57/99	Charleston	Southdown	W02	22	5.58	13
430/03	Glengarry	Poll Dorset	A05 P05 W05	124	5.58	14
1144/99	Teviotdale	Hampshire	W02	34	5.58	15
767/99	Darenal	Dorset Down	A03	14	5.58	16
33/02	RBL Rissington	Primera	W04	27	5.58	17
25/99	Tyanee	Suffolk	A04 P05	82	5.58	18
26/00	Lincoln	Dorset Down	A03	33	5.59	19
226/00	Logan	South Suffolk	A03	31	5.59	20

Dual Purpose: Range: 5.68 to 5.52

TAG	Flock	Breed	Sites	Progeny	pH BV	Rank
88/02	TRIGG	Romney	W05	25	5.52	1
1832/02	Awareka	Romney	W04 A04	75	5.53	2
5828/02	Waihora	Romney	W04	52	5.54	3
1127/95	Awareka	Romney	W03	19	5.56	4
107/97	Strathblane	Corriedale	A03	15	5.57	5
422/00	Wattlebank	Corriedale	A04/05	87	5.57	6
1235/00	Strathblane	Corriedale	A04	30	5.58	7
2165/97	Wairere	Romney	W02/03 A04	88	5.58	8
232/01	TRIGG	Romney	W03	20	5.58	9
664/98	ARDG Elite	Romney	W03	16	5.58	10
211/99	Blackdale	Coopworth	W03	30	5.58	11
138/01	Edale	Growbulk	A03	38	5.58	12
781/00	Shoreford	Romney	W03	30	5.58	13
JL1695/1	WRIG	Romney	P05	37	5.59	14
HG552/02	Clifton	Corriedale	A05	57	5.59	15
850/00	Hillcrest	Perendale	W03	30	5.59	16
531/98	Wharetoa	Coopworth	W03	29	5.59	17
493/00	Hazeldale	Perendale	W03	23	5.59	18
97/02	Raywell	Borderdale	A03/04	52	5.60	19
833/02	Tamlet	Coopworth	W05	25	5.60	20

^{*} Average pH is 5.6, increase in pH above 5.7 decreases meat tenderness

TOP 20 TERMINAL RAMS FOR MEAT AND GROWTH

ID	Flock	Breed	Sites	Progeny	Meat & growth Index	Rank	Meat Value Index	Rank	Growth Index	Rank	WWT BV (kg)	Worm FEC BV (%)	EMA BV (cm²)	Dress % BV	Fat Colour BV (b*)	Meat colour BV (a*)	pH BV
299/00	Waikite	Texel	W02/03	59	\$74.62	1	\$73.53	1	\$71.09	21	24.8	-35.27	15.23	47.3	11.1	19.7	5.61
*128/97	Punchbowl	Suffolk	W03	38	\$74.35	2	\$71.20	14	\$73.14	1	28.7	8.88	13.22	45.1	10.1	18.5	5.67
299/01	Ohio	Poll Dorset	A04	37	\$73.78	3	\$72.05	5	\$71.74	12	25.5	68.72	14.97	45.8	10.3	19.8	5.59
911/99	Murray Downs	Texel	W03	32	\$73.71	4	\$72.12	4	\$71.59	14	25.7	-9.25	12.90	46.8	11.2	19.4	5.62
400/00	Brandes Burton	Texel	W02/04	63	\$73.50	5	\$72.03	6	\$71.47	18	26.1	-2.82	13.09	46.7	10.9	20.1	5.63
4012/99	Bilberry Oaks	Hampshire	W02/03	52	\$72.97	6	\$69.87	41	\$73.10	2	28.6	79.3	11.48	44.6	10.1	18.1	5.60
106/99	Ohio	Poll Dorset	W02	46	\$72.87	7	\$70.84	18	\$72.02	7	27.1	-12.36	14.18	45.4	10.1	19.7	5.57
77/95	Douglas Downs	Dorset Horn	W02/04	75	\$72.74	8	\$71.53	10	\$71.20	20	26.8	-11.56	13.60	44.6	11.6	19.0	5.57
1296/03	Mount Linton	Texel Cross	W05	40	\$72.73	9	\$71.66	9	\$71.07	23	26.3	30.64	12.17	44.8	9.8	19.1	5.63
110/03	Murray Downs	Texel	W05	38	\$72.69	10	\$72.58	2	\$70.12	42	24.2	-19.81	13.37	46.8	10.7	19.1	5.62
44/02	WTD	Texel	P05	49	\$72.59	11	\$71.79	8	\$70.81	31	25.8	19.28	11.39	46.1	10.4	19.4	5.63
33/02	RBL Rissington	Primera	W04	27	\$72.54	12	\$70.76	22	\$71.78	11	26.9	-1.38	13.72	45.3	11.4	20.2	5.58
514/00	Linton	Poll Dorset	W04	46	\$72.48	13	\$70.17	36	\$72.31	3	27.9	24.63	11.92	45.4	9.9	19.2	5.63
T369/02	Wharetoa	Composite	A03	30	\$72.36	14	\$71.35	12	\$71.01	24	25.7	0.12	12.60	45.8	9.5	21.1	5.56
11/03	Goldstream	Suffolk	P05	24	\$72.33	15	\$70.77	20	\$71.56	15	26.5	-1.74	12.20	45.6	9.1	20.6	5.61
25/99	Tyanee	Suffolk	A04 P05	82	\$72.17	16	\$70.29	30	\$71.88	8	27.5	-15.04	11.99	44.5	14.2	19.9	5.58
*419/96	Punchbowl	Suffolk	W02	13	\$72.15	17	\$70.27	32	\$71.88	10	28.0	9.41	11.16	43.6	10.9	19.6	5.60
T533/01	Wharetoa	Composite	W02/03	57	\$72.12	18	\$70.69	24	\$71.43	19	26.1	-10.62	13.35	45.7	11.5	20.0	5.56
70/01	Torresdale	Suffolk	W05	40	\$72.11	19	\$71.26	13	\$70.85	29	26.0	8.76	12.88	44.7	9.8	19.3	5.65
021/01	Broken Hut	Texel	A03	33	\$72.10	20	\$71.47	11	\$70.64	33	25.1	5.24	13.88	45.1	10.3	20.4	5.57

TOP 20 DUAL PURPOSE RAMS FOR MEAT AND GROWTH

ID	Flock	Breed	Sites	Progeny	Meat & growth Index	Rank	Meat Value Index	Rank	Growth Index	Rank	WWT BV (kg)	Worm FEC BV (%)	EMA BV (cm²)	Dress % BV	Fat Colour BV (b*)	Meat colour BV (a*)	pH BV
132/01	Kelso	Composite	W03	31	\$70.09	1	\$70.52	3	\$69.57	10	23.8	-25	11.31	46.7	11.6	19.4	5.60
781/00	Shoreford	Romney	W03	30	\$69.90	2	\$70.24	7	\$69.66	9	26.0	14.9	11.83	42.9	11.8	21.0	5.58
88/02	TRIGG	Romney	W05	25	\$69.88	3	\$70.90	1	\$68.98	19	24.7	-2.1	10.47	43.1	10.4	21.5	5.52
232/01	TRIGG	Romney	W03	20	\$69.78	4	\$69.21	23	\$70.57	1	26.6	10.6	10.40	43.9	11.3	20.3	5.58
55/01	Bonnieview	Perendale	W05	20	\$69.68	5	\$69.71	14	\$69.97	5	25.2	17.9	11.91	44.0	10.2	19.4	5.62
435/98	Kelso	Composite	W02	31	\$69.55	6	\$70.36	4	\$69.19	18	24.4	-18.4	12.01	44.6	11.3	19.7	5.62
835/01	Poukawa	Composite	P05	85	\$69.41	7	\$69.90	10	\$69.51	11	24.4	-7.4	11.42	44.8	13.5	18.4	5.68
97/02	Raywell	Borderdale	A03/04	52	\$69.20	8	\$69.78	12	\$69.42	13	24.9	6.2	10.72	43.6	11.8	20.5	5.60
531/98	Wharetoa	Coopworth	W03	29	\$69.11	9	\$69.65	18	\$69.46	12	25.9	78.8	11.49	43.4	12.3	20.5	5.59
34/01	Twin Farm	TEFRom	W03	33	\$68.88	10	\$70.62	2	\$68.26	32	23.0	6.3	10.73	45.1	10.1	19.7	5.61
138/01	Edale	Growbulk	A03	38	\$68.86	11	\$70.23	8	\$68.63	26	23.0	52.5	12.92	45.5	10.6	18.9	5.58
172/02	Glen Rannoch	Perendale	A04	34	\$68.71	12	\$69.31	22	\$69.40	14	23.8	13	10.96	45.6	11.3	20.5	5.60
300/03	MNCC	Coopworth	W05	27	\$68.69	13	\$68.72	32	\$69.98	4	24.6	-22.9	12.20	45.7	10.7	19.2	5.60
5093/99	Meadowslea	Romney	A03	22	\$68.65	14	\$68.90	28	\$69.75	7	24.9	-22.6	10.21	44.3	13.5	20.0	5.63
85/00	Tahakita	Coopworth	W04 A04	76	\$68.64	15	\$69.95	9	\$68.69	24	23.1	18.2	12.23	45.0	12.6	20.4	5.63
2165/97	Wairere	Romney	W02/03 A04	88	\$68.63	16	\$68.19	37	\$70.45	2	25.8	-12	11.58	44.4	13.1	20.4	5.58
1035/02	Newhaven	Perendale	W04	32	\$68.59	17	\$69.33	21	\$69.27	17	23.5	-32.3	10.71	45.6	10.7	20.9	5.62
11/01	Little River	Cheviot	A03 W03	64	\$68.58	18	\$70.25	6	\$68.33	31	22.4	-3.96	12.10	46.4	14.4	20.3	5.64
107/97	Strathblane	Corriedale	A03	15	\$68.53	19	\$69.90	11	\$68.62	27	24.4	8.4	12.57	42.8	10.0	21.0	5.57
493/00	Hazeldale	Perendale	W03	23	\$68.50	20	\$68.74	30	\$69.76	6	24.5	26.5	11.25	44.6	13.6	20.9	5.59

ANIMAL MANAGEMENT PROCEDURES

To date, a total of 97 sires from 14 terminal and 8 dual purpose breeds have been evaluated in the M&WNZ CPT (formerly the Alliance CPT). There are some differences in animal management across the three sites that reflect differences in geographical location and the average performance of the ewe flock at each site. However, wherever possible the animal management procedures are exactly the same between sites. The following is a brief summary of the management procedures applied across sites.

Mating

The aim across the three CPT sites is have at least 20 progeny per sire for the evaluation of a sire's meat and growth performance for both terminal and dual purpose sires, and 25 ewe progeny retained for maternal evaluations of the dual purpose sires. Numbers of ewes allocated varies between sites due to differences in fertility in the ewe flocks. All ewes are synchronised for mating using CIDRs, whether mated naturally or by AI.

Lambing

The flocks are split into single-bearing and multiple bearing mobs prior to lambing. Lambs are tagged and weighed within 12 hours of birth. Sex, birth rank and rearing rank are recorded at the same time. At some sites, the smallest triplet is mothered on to a single bearing ewe.

Docking

Lambs are vaccinated for diseases and conditions that are relevant to each site. Live weights are collected at docking. Lambing mobs are usually joined together at docking and the grazing mob is recorded

Weaning

Weaning occurs at 12 weeks of age. Live weight is recorded at weaning and a faecal sample collected to measure faecal egg count. Lambs are also dag scored at this time. Lambs which remain after weaning (the first draft for slaughter occurs at weaning) are drenched with an oral anthelmintic.

Drafting for meat and growth performance assessment

All lambs from the terminal sires are drafted for slaughter once they reach the target live weight to achieve a carcass weight of 18kg. All ram lamb progeny and the surplus ewe lamb progeny from the dual purpose sires are slaughtered. The first draft occurs at weaning, followed by drafts at monthly intervals thereafter. All remaining slaughter lambs are drafted in the March slaughter. Measurements collected at slaughter include the VIAscan measurements of lean weight in the hindleg, loin and shoulder, dressing percentage, eye muscle area, meat and fat colour and meat pH.

Ewe maternal performance assessment for dual purpose sires

Ewe lambs from the dual purpose sires are retained for evaluation of maternal traits. Ewe lambs are mated first as hoggets and then as two-tooths. In 2007, the first ewe progeny retained from dual purpose sires will be mated as four tooths. Number of lambs born and lamb survival are recorded at each lambing. Date of hogget oestrus and ewe mating weight are also recorded. No further data are recorded on the ewes after the four-tooth lambing results are collected.

Timetable of events for key dates at the three CPT sites

Event	Poukawa	Ashley Dene	Woodlands
Start of mating	2 March	7 April	13 April
Start of lambing	27 August	1 September	1 September
Docking	At birth	18 September	27 September
Weaning	4 November	5 December	12 December
First draft	15 November	11 December	14 December
Second draft	7 December	22 January	11 January
Third draft	18 January	1 March	8 February
Fourth draft	8 February		9 March
Fifth draft	22 March		

FUTURE OF THE CPT

The fifth cycle of matings (2006) has been completed at Woodlands, Ashley Dene and Poukawa. A total of 12 new terminal sire rams and 11 new dual purpose rams have been mated this year to bring the total rams evaluated to 120.

As with the previous three years, ewe progeny from dual purpose sires will be retained to measure maternal traits and ram progeny will be slaughtered to measure their meat production performance.

The first of the ewe progeny have been mated as two-tooths in this years mating (2006). Hogget and two-tooth lambing results will be made available once the two tooth lambing results come to hand.

Industry Outcomes

- Improve genetic linkages between flocks within a breed, and across breeds. These
 linkages enhance the ACE analysis (<u>www.silace.co.nz</u> for results) carried out by SIL
 and ultimately enable better benchmarking of performance between flocks
- Demonstrating genetic variation in animal performance to the New Zealand sheep industry, including why genetic evaluations are the best information to select rams on
- The genetics of new commercial traits can be evaluated in the CPT

Sire entry into the CPT

A call is made for expressions of interest to supply rams to the CPT in November each year. All SIL recorded flock and major breeding groups in New Zealand receive notification of the call. The individual ram selection decision is left to the breeder, but spaces in the CPT are allocated on the basis of

- performance information for the individual ram in SIL recorded flocks
- · widespread use of the ram across flocks
- the ram should have existing, SIL recorded, across flock information available

Alternatively, any ram can be entered into the CPT on a cost-recovery basis.

MEAT & WOOL

NEW ZEALAND

www.meatandwoolnz.com