

Table 5. Mean weighted^a accuracies for birth weight (BWT), weaning weight (WWT), yearling weight (YWT), maternal weaning weight (MWWT) and milk (MILK) for bulls used at MARC

Breed	BWT	WWT	YWT	MWWT	MILK
Hereford	0.62	0.59	0.53	0.55	0.53
Angus	0.89	0.87	0.84	0.83	0.81
Shorthorn	0.82	0.80	0.74	0.82	0.76
South Devon	0.37	0.39	0.37	0.41	0.42
Brahman	0.50	0.54	0.37	0.54	0.41
Simmental	0.93	0.92	0.92	0.96	0.95
Limousin	0.94	0.92	0.88	0.95	0.91
Charolais	0.80	0.78	0.68	0.76	0.67
Maine-Anjou	0.69	0.68	0.68	0.68	0.67
Gelbvieh	0.74	0.69	0.62	0.69	0.64
Pinzgauer	0.85	0.68	0.62	0.70	0.64
Tarentaise	0.95	0.95	0.94	0.95	0.95
Salers	0.83	0.77	0.72	0.77	0.76
Red Angus	0.82	0.79	0.78	0.79	0.75
Braunvieh	0.77	0.70	0.69	0.70	0.48

^aWeighted by number of progeny at MARC for BWT, WWT, and YWT and by number of grand progeny for MWWT and MILK.

Table 6. REML estimates of variance components (lb^2) for birth weight (BWT), weaning weight (WWT), yearling weight (YWT), and maternal weaning weight (MWWT) from mixed model analyses

Analysis ^a	Direct			Maternal
	BWT	WWT	YWT	MWWT
Direct				
Sires (591) within breed (15)	11.0	150	643	
Dams (4049) within breed (3)	27.3	874	1176	
Residual	67.6	1511	4141	
Maternal				
MGS (509) within MGS breed (15)				183
Daughters within MGS (2455)				882
Residual				1264

^aNumbers for weaning weight.

Table 7. Pooled regression coefficients (lb/lb) for weights at birth (BWT), 205 days (WWT), and 365 days (YWT) of F₁ progeny on sire expected progeny difference and by sire breed, dam breed, and sex of calf

	BWT	WWT	YWT
Pooled	1.01 ± 0.05	0.90 ± 0.06	1.19 ± 0.05
Sire breed			
Hereford	1.10 ± 0.09	0.96 ± 0.10	1.30 ± 0.09
Angus	1.03 ± 0.12	0.78 ± 0.10	1.17 ± 0.08
Shorthorn	0.77 ± 0.47	0.79 ± 0.43	1.32 ± 0.37
South Devon	0.81 ± 0.59	-0.28 ± 0.37	-0.14 ± 0.43
Brahman	1.86 ± 0.26	1.09 ± 0.27	0.72 ± 0.24
Simmental	1.08 ± 0.22	1.24 ± 0.17	1.34 ± 0.15
Limousin	0.73 ± 0.17	0.56 ± 0.15	1.14 ± 0.14
Charolais	0.99 ± 0.14	0.94 ± 0.14	1.02 ± 0.14
Maine-Anjou	1.23 ± 0.38	0.55 ± 0.46	0.35 ± 0.48
Gelbvieh	1.04 ± 0.16	1.28 ± 0.27	1.28 ± 0.23
Pinzgauer	1.25 ± 0.17	1.47 ± 0.21	1.66 ± 0.16
Tarentaise	0.85 ± 0.90	0.88 ± 0.56	1.34 ± 0.62
Salers	1.17 ± 0.37	1.17 ± 0.49	0.78 ± 0.44
Red Angus	0.59 ± 0.20	0.64 ± 0.35	0.75 ± 0.32
Braunvieh	-0.13 ± 0.52	0.70 ± 0.85	1.02 ± 0.60
Dam breed			
Hereford	0.96 ± 0.08	0.81 ± 0.09	1.05 ± 0.08
Angus	1.08 ± 0.07	0.93 ± 0.07	1.26 ± 0.07
MARC III	0.96 ± 0.08	0.95 ± 0.10	1.24 ± 0.09
Sex of calf			
Heifers	0.99 ± 0.06	1.03 ± 0.07	1.02 ± 0.06
Steers	1.04 ± 0.06	0.78 ± 0.07	1.36 ± 0.06

Table 8. Pooled regression coefficients (lb/lb) for progeny performance on maternal grandsire EPD for weaning weight (MWWT) and milk (MILK) and by breed of maternal grandsire, breed of maternal grandam, and sex of calf

Type of regression	MWWT	MILK
Pooled	0.51 ± 0.05	1.18 ± 0.07
Breed of maternal grandsire		
Hereford	0.47 ± 0.09	1.17 ± 0.13
Angus	0.56 ± 0.10	1.01 ± 0.15
Shorthorn	0.23 ± 0.36	0.74 ± 0.44
South Devon	0.32 ± 0.25	-1.23 ± 0.82
Brahman	0.38 ± 0.21	0.72 ± 0.36
Simmental	0.70 ± 0.22	1.30 ± 0.56
Limousin	0.79 ± 0.19	2.48 ± 0.30
Charolais	0.39 ± 0.16	1.45 ± 0.25
Maine-Anjou	-0.02 ± 0.32	0.38 ± 0.37
Gelbvieh	0.60 ± 0.28	1.38 ± 0.36
Pinzgauer	0.70 ± 0.20	0.38 ± 0.58
Tarentaise	0.22 ± 0.66	0.73 ± 0.80
Salers	0.77 ± 0.33	1.86 ± 0.32
Red Angus	0.70 ± 0.77	1.44 ± 0.95
Braunvieh	0.00 ± –	2.21 ± –
Breed of maternal grandam		
Hereford	0.44 ± 0.07	1.49 ± 0.12
Angus	0.59 ± 0.06	1.10 ± 0.11
MARC III	0.43 ± 0.10	0.84 ± 0.15
Sex of calf		
Heifers	0.53 ± 0.06	1.07 ± 0.10
Steers	0.50 ± 0.06	1.16 ± 0.10