

SA Stud Book Annual

Logix Beef Report



Ankole

Borguni

Chianina

Charbray

Murray
Grey

Wagyu

2013



Introduction

Information has been obtained from Logix as on 31/12/2013. There were 30 breeds registered at SA Stud Book, of which 28 breeds participated in Logix Beef.

Birth Weight, Pre-wean Weight, Weaning Weight, 12 Month Weight, 18 Month Weight, Cow Weight at Calving, Cow Weight at Weaning of Calf, Age at First Calving (AFC) and Inter-calving Period (ICP) are measured on the farm by the farmer himself. The environment in which these traits are measured therefore varies between herds. Environmental factors include veld type, climate, management practices, terrain and available feed. Traits such as Height, Length, Skin Thickness, Scrotal Circumference, Final Weight and Real-Time Ultrasound (RTU) measurements are taken by the technical advisor allocated to a particular area at the end of the on-farm testing. In 2013, 15 breeds took part in on-farm testing.

Centralised testing takes place at various centralised testing centres located through-out the country. The animals are individually fed a standardised ration and are compared within the same environment. There is an adaptation period of 28 days, followed by a test length of 84 days. Body weights and feed intake are measured regularly, and Height, Length, Skin Thickness, Scrotal Circumference, Final Weight and RTU measurements are taken at the end of the test. Individual feed intake measurements allow for the calculation of feed conversion ratio (FCR), a measure of feed efficiency. In 2013, 20 breeds took part in centralised testing.

Percentages and average values may be misleading when there are few herds or animals, and is not necessarily a true representation of the breed. For example, a participation percentage of 80 on a breed with 1000 is a good representation of the breed, as this includes 800 herds, but on a breed with 5 herds it is not, as this only includes 4 herds.

Be careful when comparing the performance of breeds with each other. The values presented here are dependent on genetic merit and environmental factors, and the breeding objectives may differ between breeds.

Pie charts are presented for herds registered at SA Stud Book and herds in Logix Beef. All breeds with less than 20 herds are grouped as “other”.

The gender of the animals presented in the tables is both indicated in the title and with the use of a background picture, where:



= Female



= Male

Content:

Table 1: Number of herds registering at SA Stud Book, herds participating in Logix Beef and percentage participation on 31/12/2013.

Table 2: Foreign breeds summary

Pie chart 1: Herds registering at SA Stud Book 2013

Pie chart 2: Herds participating in Logix Beef 2013

Pie chart 3: Animals registered at SA Stud Book in 2013

Pie chart 4: Animals participating in Logix Beef in 2013

Table 3: Number of animals registering at SA Stud Book, participating in Logix Beef, and percentage participation on 31/12/2013

Table 4: Number of animals in production tests per breed (01/01/2013 – 31/12/2013)

Table 5: Number of **male animals with weight measurements and the average value per breed (as on 31/12/2013)**

Table 6: Number of **female animals with weight measurements, and the average value per breed (as on 31/12/2013)**

Table 7: Central testing results (only male animals) from 01/01/2013 to 31/12/2013

Table 8: On-farm testing results (only male animals) from 01/01/2013 to 31/12/2013

Table 1: Number of herds participating in Logix Beef on 31/12/2013

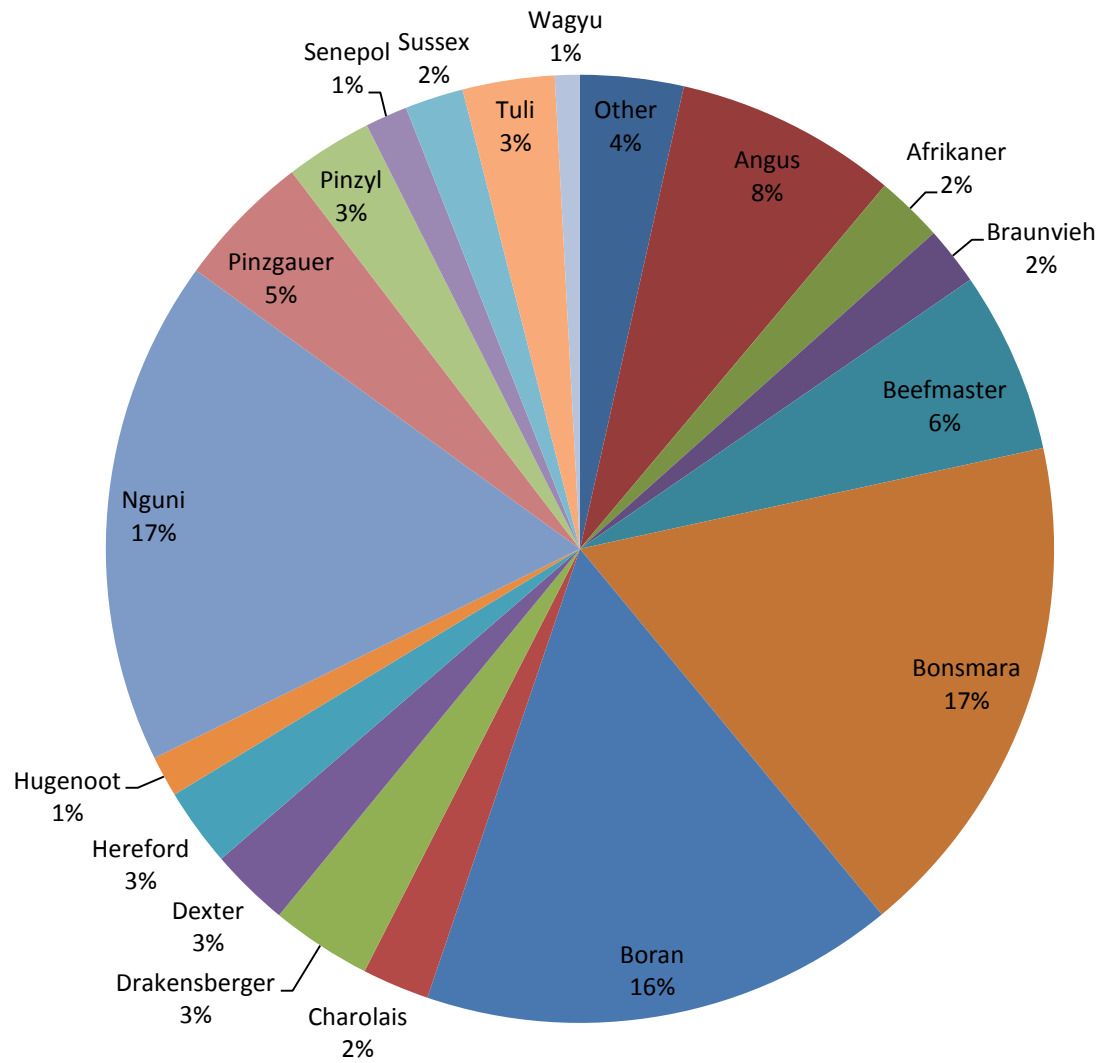
Breed -SA	Number of herds					Percentage participation		
	Reg. 2013	Reg. 2012	Reg. 2011	% of 2012	Logix	2013	2012	2011
Angus	179	178	179	101	125	70	69	71
Afrigus	12	11	11	109	7	58	64	64
Afrikaner	54	57	67	95	43	80	74	70
Ankole	5	5	5	100	1	20	20	20
Afrisim	7	12	12	58	7	100	67	58
Braunvieh	47	47	49	100	20	43	40	51
Borguni	9	10	7	90	5	56	60	57
Beefmaster	146	142	132	103	121	83	85	89
Bonsmara	411	403	402	102	409	100	94	96
Boran	382	368	340	104	91	24	23	26
Beef shorthorn	7	8	8	88	3	43	25	25
Charbray	2	2	2	100	2	100	50	50
Charolais	54	52	54	104	47	87	83	83
Chianina	2	2	1	100	0	0	0	100
Drakensberger	81	79	83	103	77	95	91	94
Dexter	64	60	50	107	12	19	17	14
Gelbvieh	2	3	3	67	2	100	67	67
Hereford	63	65	71	97	51	81	78	73
Hugenoot	33	31	31	106	15	45	35	29
Murray Grey	2	2	2	100	0	0	0	0
Nguni	407	417	436	98	88	22	20	22
Pinzgauer	109	80	63	136	23	21	25	32
Pinzyl	70	51	36	137	13	19	6	8
Romagnola	19	17	14	112	10	53	41	43
Red Poll	9	9	9	100	5	56	44	44
South Devon	7	7	8	100	7	100	100	100
Senepol	34	35	29	97	33	97	23	28
Sussex	47	60	60	78	42	89	75	80
Tuli	74	69	67	107	66	89	55	54
Wagyu	20	16	15	125	6	30	13	7
Total & Av.	2358	2298	2246	101	1200	59	48	52

All highlighted areas indicate an increase from one year to the next. The percentage in red font is the number of herds registered at SA Stud Book in 2013 over those in 2012.

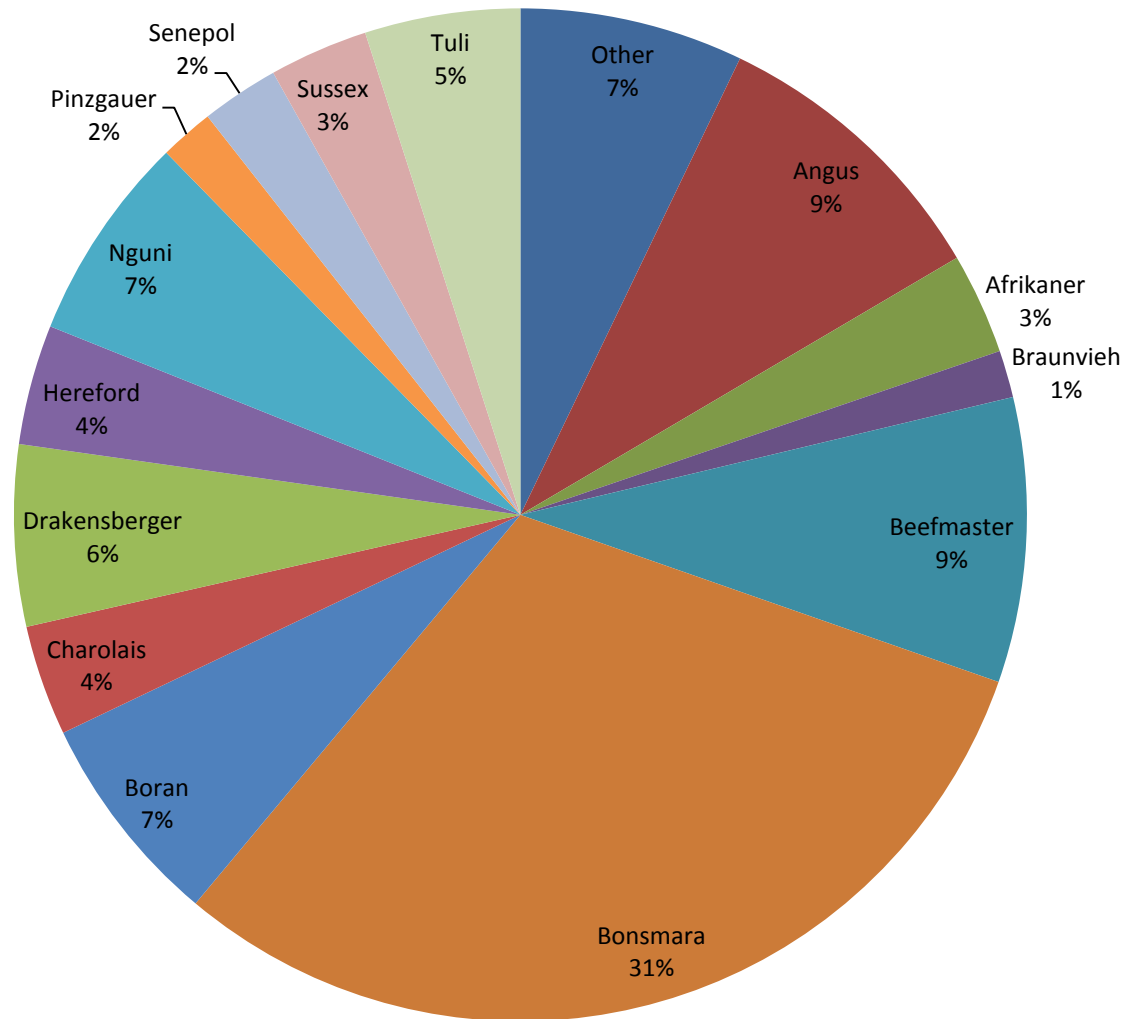
Table 2: Foreign breeds summary

Breed	Herds reg.	Animals reg.	Herds in Logix	Animals in Logix	% Participation (herds)
Bonsmara (Argentina)	34	2079	32	2060	94
Bonsmara (Brazil)	8	7594	8	7594	100
Bonsmara (Columbia)	2	43	2	43	100
Bonsmara (Namibië)	44	14790	44	14790	100
Total	88	24506	86	24487	98.5

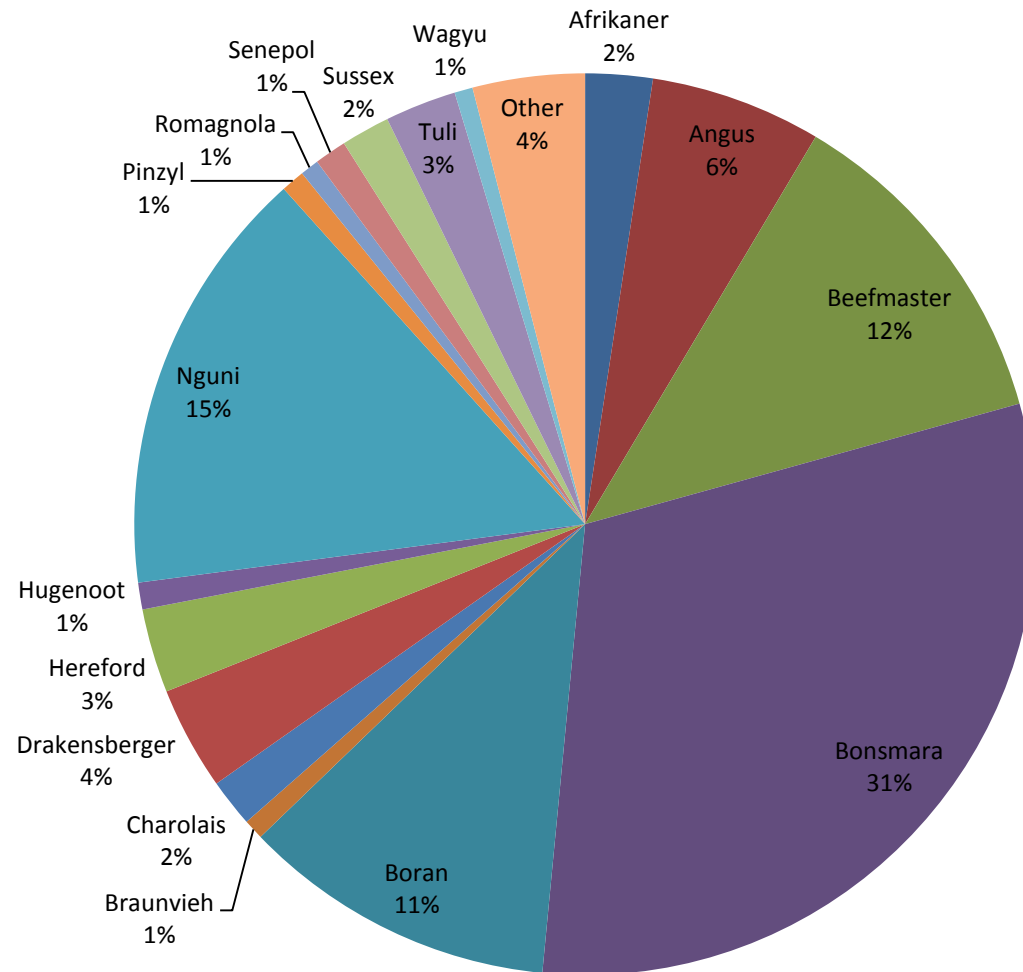
Herds registering at SA Stud Book in 2013



Herds participating in Logix Beef in 2013



Animals registered at SA Stud Book in 2013



Animals participating in Logix Beef in 2013

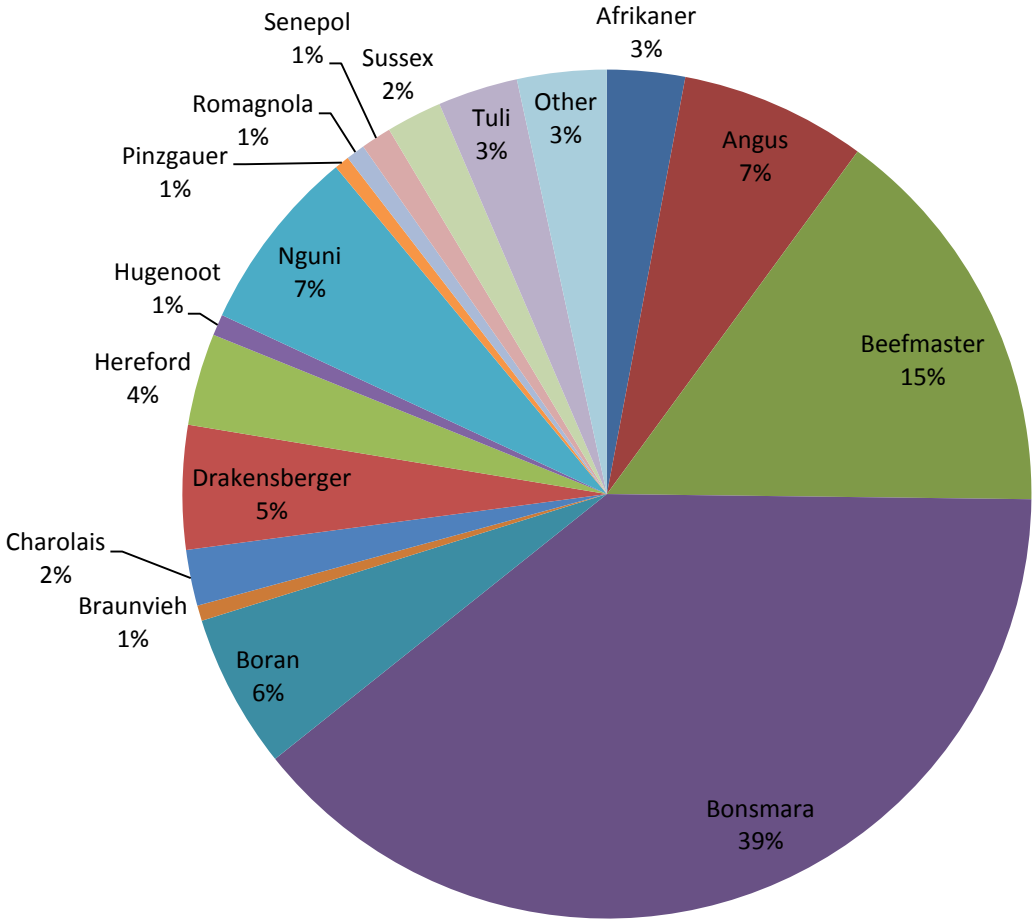


Table 3: Number of animals participating in Logix Beef on 31/12/2013

Breed	Males		% part.	Females		% part.	All animals		% part.
	Reg.	Logix		Reg.	Logix		Reg.	Logix	
Angus	8080	7355	91	21824	19776	91	29904	27131	91
Afrigus	503	443	88	1196	973	81	1699	1416	83
Afrikaner	3026	2948	97	8719	8383	96	11745	11331	96
Ankole	522	318	61	1443	915	63	1965	1233	63
Afrisim	463	463	100	1270	1270	100	1733	1733	100
Braunvieh	811	495	61	2732	1762	64	3543	2257	64
Borguni	541	244	45	1275	438	34	1816	682	38
Beefmaster	16239	16012	99	42962	41890	98	59201	57902	98
Bonsmara	41215	40958	99	109005	108532	100	150220	149490	100
Boran	13021	5550	43	41959	17012	41	54980	22562	41
Beef shorthorn	203	94	46	922	232	25	1125	326	29
Charbray	72	72	100	154	154	100	226	226	100
Charolais	2446	2379	97	5929	5768	97	8375	8147	97
Chianina	102	0	0	361	0	0	463	0	0
Drakensberger	5325	5321	100	12757	12728	100	18082	18049	100
Dexter	703	311	44	2457	830	34	3160	1141	36
Gelbvieh	258	258	100	938	938	100	1196	1196	100
Hereford	3873	3450	89	10828	9960	92	14701	13410	91
Hugenoot	1045	776	74	3635	2307	63	4680	3083	66
Murray Grey	169	0	0	373	0	0	542	0	0
Nguni	20407	7856	38	54748	19136	35	75155	26992	36
Pinzgauer	1062	901	85	1869	1255	67	2931	2156	74
Pinzyl	671	168	25	3462	1224	35	4133	1392	34
Romagnola	695	591	85	2576	2166	84	3271	2757	84
Red Poll	241	136	56	1115	613	55	1356	749	55
South Devon	375	375	100	1012	1012	100	1387	1387	100
Senepol	1261	899	71	4343	3531	81	5604	4430	79
Sussex	2469	2397	97	6071	5711	94	8540	8108	95
Tuli	3636	3363	92	8836	8304	94	12472	11667	94
Wagyu	970	431	44	2207	1106	50	3177	1537	48
Total and Av.	130404	104564	71	356978	277926	69	487382	382490	70

Table 4: Number of animals in production tests per breed (01/01/2013 – 31/12/2013)

Breed	Central testing				On-farm	Percentage successful of all breeds	
	Nr of animals start	Percentage start of all breeds	Nr of animals successful	% Success in breed	Nr of animals	Central	On-farm
Angus	53	6.16	40	75.47	412	12.08	3.76
Afrikaner	1	0.12	1	100.00	170	0.30	1.55
Afrisim	10	1.16	6	60.00	40	1.87	0.37
Beefmaster	12	1.40	12	100.00	659	3.63	6.01
Braunvieh	20	2.33	8	40.00		2.42	
Boran					35		0.32
Bonsmara	540	62.79	153	28.33	8608	46.22	78.57
Beef shorthorn	7	0.81	4	57.14		1.21	
Charolais	13	1.51	11	100.00	39	3.32	0.36
Drakensberger	63	7.33	2	3.17	226	0.60	2.06
Dexter	6	0.70	5	83.33	10	1.51	0.09
Hereford	43	5.00	27	62.79	137	8.16	1.25
Hugenoot	20	2.33	13	65.00	17	3.93	0.16
Nguni	12	1.40	12	100.00	141	3.63	1.29
Pinzgauer	7	0.81	5	71.43		1.51	
Pinzyl	4	0.47	3	75.00		0.91	
Romagnola	11	1.28	7	63.64		2.11	
South Devon	5	0.58	4	80.00	47	1.21	0.43
Senepol	8	0.93	5	62.50		1.51	
Sussex	24	2.79	12	50.00	229	3.63	2.09
Tuli					186		1.70
Wagyu	1	0.12	1	100.00		0.30	
Total	860	100	331	48.89	10956	100	100

Number of breeds in central testing = 20

Number of breeds in on-farm testing = 15

Table 5: Number of male animals with weight measurements and the average value per breed (as on 31/12/2013)

Breed	Birth		Pre-wean		Wean		12month		18 month	
	Nr of animals	Ave. value	Nr of animals	Ave. value	Nr of animals	Ave. value	Nr of animals	Ave. value	Nr of animals	Ave. value
Angus	2941	35.9	60	158	1877	250	504	336	389	510
Afrigus	98	33.7			93	195	15	280	9*	440
Afrikaner	198	31.1	52	129	527	208	65	260	31	366
Ankole					63	198				
Afrisim	71	38.8			140	247	6*	285		
Braunvieh	277	40.0	22	154	116	251	50	310	37	458
Borguni	41	28.9			20	187	1*	218		
Beefmaster	5812	34.7			4783	245	1237	322	1666	434
Bonsmara	19565	36.2	1140	135	17568	234	1898	291	1530	398
Boran	2866	30.0			573	215	144	258	130	366
Beef shorthorn	45	42.3	21	132	45	234	19	339	16	504
Charbray	16	36.4			5*	276	1*	385	2*	539
Charolais	665	41.0	1*	241	610	241	382	343	226	455
Drakensberger	1628	35.6	111	139	1338	232	763	261	419	362
Dexter	227	26.0			33	180			1*	286
Gelbvieh	105	36.6	92	154	3*	209	2*	296	17	336
Hereford	960	37.5	86	154	597	231	133	315	70	445
Hugenoot	211	38.7	19	130	138	246	39	259	29	343
Nguni	1414	26.1	118	93	1348	167	216	220	87	268
Pinzgauer	182	36.0			77	217	3*	424	2*	539
Pinzyl	84	27.3			36	203				
Romagnola	36	41.9			101	281	24	343	5*	474
Red Poll	42	36.3			22	236	6*	250	7*	457
South Devon	197	36.7			166	237	2*	331	28	403
Senepol	238	37.1			103	217	25	322	5*	389
Sussex	950	38.5	35	122	718	240	441	355	443	498
Tuli	1048	32.6	7*	135	724	209	224	256	213	347
Wagyu	118	30.5			1*	232				
Total & Av.	40035	35.1	1764	135	31825	232	6200	301	5362	421

* Averages based on few measurements are not meaningful representations of the breed and should be interpreted with caution.

Table 6: Number of female animals with weight measurements, and the average value per breed (as on 31/12/2013)

Breed	Birth		Pre-wean		Wean		12 month		18 month		AFC		ICP		Cow weights #			
	Nr of animals	Ave. value	Nr of animals	Ave. value	Nr of animals	Ave. value	Nr of animals	Ave. value	Nr of animals	Ave. value	Nr of animals	Ave. value (m)	Nr of animals	Ave. value	At calving		At wean	
															Nr of animals	Ave. value	Nr of animals	Ave. value
Angus	2790	34.3	73	156	1973	240	833	295	545	402	1147	29.5	4270	399	754	557	1580	548
Afrigus	87	31.2			69	188	44	195	50	251	37	30.3	173	400			106	414
Afrikaner	214	30	49	116	651	192	162	235	263	302	214	32.8	1263	452	91	435	608	468
Afrisim	82	35.8					17	297	25	348	29	28.6	236	400			89	475
Ankole					58	184					27	34	132	377				
Braunvieh	278	37.3	20	148	132	243	80	270			102	30.6	505	449	300	486	167	496
Borguni	29	26.6			25	180	1*	206			20	31.3	3*	373	12	364		
Beefmaster	5478	32.8			4787	230	2182	270			2127	29.8	9661	405	1611	504	4793	501
Bonsmara	18499	34.1	1199	125	17437	219	12411	258	10305	336	7663	30.2	31590	410	18383	496	30668	501
Boran	2935	28.4			707	196	331	215	236	309	1718	31.1	5099	416	1380	437	881	440
Beef shorthorn	53	39.3	22	123	33	231	23	272	15	375	20	30.2	80	402			76	543
Charbray	13	32.3	2*	191	6*	286	1*	384	4*	404	7*	30.6	10	377			9*	600
Charolais	680	39	1*	227	630	234	431	290	252	373	204	32.5	1163	434	263	567	889	601
Drakensberger	1691	33.5	92	126	1362	214	1144	228	768	313	479	32.8	2762	419	818	466	1078	497
Dexter	221	24.3			28	161					123	24.3	462	437	119	314	82	313
Gelbvieh	129	35.1	96	143	4*	216	2*	308	28	308	11	32.9	217	417	234	559	7*	541
Hereford	967	35.7	101	143	536	223	325	300	163	379	411	29.6	1522	387	781	530	692	562
Hugenoot	205	36.6	27	122	139	229	109	274	73	355	63	33.5	374	479	188	515	180	562
Murray Grey											1*	33.5	1*	359				
Nguni	1412	24.8	101	85	1528	153	494	173	372	227	2575	29.7	12137	400	778	342	2438	359
Pinzgauer	194	34.8			80	205	70	264	51	302	61	30.7	264	484	80	439	143	479
Pinzyl	75	26.6			108	177	2*	223	3*	240	17	33.5	108	414	2*	410	72	461
Romagnola	32	39.8			89	263			3*	439	15	32.1	323	422	19	622	7*	655
Red Poll	28	36.1			14	222	12	251	18	365	3*	24.2	64	445	50	474	35	462
South Devon	209	34.4			178	221	7*	324	82	349	95	33.7	284	384	53	420	263	488
Senepol	298	35.2			132	199	94	263	83	323	132	30.6	317	454	237	470	108	448
Sussex	878	37.1	26	119	691	223	494	295	630	353	355	30.5	1476	416	548	577	1042	579
Tuli	1007	31	8*	126	767	194	374	210	486	295	385	31.5	1630	391	393	425	1270	444
Wagyu	113	28.5									37	26.9	151	420				
Total & Av.	38597	33	1817	126	32164	217	19643	258	14455	334	18078	30	76277	409	27094	491	47283	496

* Averages based on few measurements are not meaningful representations of the breed and should be interpreted with caution.

Cow weights are the weights of the cow at calving and weaning of her calf respectively.

Table 7: Central testing results (only male animals)

Breed	Animals	Final weight (kg)	ADG (g)	FCR (kg/kg)	Height (mm)	Length (mm)	Skin thickness (mm)	Scrotal circum. (mm)	Nr of animals RTU	Rib fat thickness (mm)	Rump fat thickness (mm)	Eye muscle area (cm ²)	Marbling (%)
Angus	53	461	1907	5.95	1262	1436	12	341	8*	2.3	3.4	75	2.8
Afrikaner	1*	339	1245	7.96	1193	1329	15	333					
Afrisim	10	435	1600	6.67	1232	1415	16	345	5*	1.1	1.6	64	2.9
Braunvieh	19	426	1822	5.64	1215	1426	14	343	13	2.1	3.7	66	2.9
Beefmaster	12	448	1710	7.36	1218	1422	15	353	12	2.6	4.0	69	2.9
Bonsmara	534	403	1673	5.74	1194	1413	15	337	401	2.9	4.8	67	2.6
Beef shorthorn	7*	474	1861	6.60	1249	1402	12	329	2*	3.2	5.9	62	3.6
Charolais	3*	460	1913	5.64	1245	1440	14	317	3*	2.7	4.2	73	4.6
Drakensberger	63	375	1526	5.95	1169	1386	15	320	61	2.2	3.1	57	2.4
Dexter	6*	344	1340	5.83	1083	1267	15	302					
Hereford	43	451	1805	5.40	1265	1428	15	339	11	4.2	5.5	69	3.0
Hugenoot	20	455	1788	6.37	1207	1398	17	329	19	1.4	2.2	70	2.3
Nguni	12	324	1299	6.62	1105	1337	14	287	12	2.7	4.1	58	2.4
Pinzgauer	7*	445	1855	6.09	1192	1385	18	336	5*	2.5	4.0	66	2.8
Pinzyl	4*	375	1473	7.13	1155	1337	16	344	4*	4.0	5.8	67	3.7
Romagnola	11	455	1769	5.84	1283	1454	14	336	3*	2.6	3.8	72	2.2
South Devon	5*	450	1773	5.58	1177	1410	12	344	1*	3.8	5.1	72	1.9
Senepol	8*	412	1545	5.95	1196	1428	14	335	5*	3.1	5.9	63	1.4
Sussex	24	397	1764	5.46	1197	1392	15	329	19	1.5	2.6	65	4.5
Wagyu	1*	391	1511	6.37	1200	1422	11	264	1*	1.9	2.8	73	4.3
Total and av.	843	410	1659	5.83	1201	1396	15	328	585	2.7	4.4	66	2.7

* Averages based on few measurements are not meaningful representations of the breed and should be interpreted with caution.

Table 8: On-farm testing results (only males)

Breed	Animals	Final weight (kg)	ADG (g)	Height (mm)	Length (mm)	Skin thickness (mm)	Scrotal circum. (mm)	Nr of animals RTU	Rib fat thickness (mm)	Rump fat thickness (mm)	Eye muscle area (cm²)	Marbling (%)
Angus	412	470	1428	1251	1435	14	348	171	3.6	5.0	76	3.3
Afrikaner	170	328	818	1169	1303	15	326					
Afrisim	40	425	1670	1181	1400	17	334					
Beefmaster	659	378	914	1167	1371	13	337	68	3.0	4.0	54	2.0
Bonsmara	7862	413	1362	1173	1400	15	340	930	3.1	5.0	68	2.3
Boran	35	348	643	1154	1303	14	312	10	2.4	3.3	58	2.3
Charolais	39	452	1679	1263	1433	12	319					
Drakensberger	208	407	1200	1165	1390	15	332	31	3.3	5.1	59	2.4
Dexter	10	271	751	1039	1260	13	274	10	1.6	1.9	42	2.1
Hereford	137	463	1409	1264	1426	14	333	50	3.7	5.3	66	2.6
Hugenoot	17	474	1420	1225	1489	19	347	17	0.4	0.5	75	2.7
Nguni	141	277	648	1102	1258	13	298	32	1.7	2.0	45	2.2
South Devon	47	431	1048	1182	1385	12	363					
Sussex	194	409	1138	1177	1410	15	332	43	3.1	5.1	67	2.6
Tuli	186	353	821	1169	1335	13	304					
Total and av.	10157	409	1130	1176	1373	15	327	1362	3.10	4.80	67	2.43

