



CENTRAL PERFORMANCE TEST REPORT FOR BEEF BULLS

May 2003

Attached are performance test results for the group of beef bulls which completed central performance test in May 2003 at the beef performance testing station at Tully, Co Kildare.

Performance testing

Central performance testing is a central part of the national programme for the genetic improvement of beef cattle in Ireland and provides very useful information for selecting bulls for entry into AI. The testing is organised by I C B F, the Irish Cattle Breeding Federation in conjunction with the Herdbook Associations who organise the selection of the bulls. Performance testing involves the evaluation of selected beef bulls of various beef breeds from many herds for a number of important economic traits. It is the only way by which economically important feed conversion efficiency trait can be accurately evaluated. Pedigree bulls are evaluated under uniform conditions of feeding, housing and management in order to identify the genetically superior bulls. Central performance testing enables more accurate estimates of breeding values to be obtained very early in a bulls breeding life in contrast to an on-farm or a progeny test which takes significantly longer and does not evaluate feed efficiency.

Bulls enter the test station at approximately 6 months of age having passed a thorough health test. They remain on test for approximately 6 months. They are fed to appetite on a high quality diet. Feed intakes are individually recorded to facilitate the estimation of feed efficiency.

Traits Measured and Evaluated

Many traits including Growth Rate, Feed Conversion Efficiency, Carcass Merit and Withers Height are recorded. Carcass merit is evaluated by recording eye muscle area and fat area using ultrasound-scanning equipment.

The recorded traits are combined to give three sub-indices as follows:-

- Growth Index which is calculated primarily from the adjusted final weight and withers height of the bull;

- Feed Conversion Index;
- Carcass Merit Index which is calculated from the eye-muscle area, fat area and visual muscling score of the bull;

Finally these sub-indices are combined to give an overall index of merit called the BEEF MERIT INDEX. Approximately equal weightings are given to each sub-index in the calculation of this overall index.

The interpretation of these Indices

The breed means for the beef merit index and the sub-indices are set to a national breed average of 100. The standard deviations of the indices are set to 10. Bulls scoring 110 or greater in any indices are expected to come from the top 15% of the national population and bulls scoring 90 or less are expected to come from the bottom 15% of the population for that index.

By choosing a bull from the top of its breed for genetic merit, a beef producer can expect to increase overall profitability by either reducing production costs or increasing carcass value.

Linear scoring

Linear scoring is now becoming a widely used tool in the evaluation of beef breeding animals. It has long been used in the dairy industry to describe type traits in dairy animals. As more breed Associations are now incorporating the tool into their breeding strategies, it is now appropriate that the BLUP linear scoring evaluation system be used in place of the visual assessment procedure used in the past at the central performance test station. The linear scoring procedure is being adapted to harmonise with ICAR guidelines. Historically a single overall visual assessment score was given to each bull upon completion of the test. Such a single figure failed to describe the various physical or anatomical characteristics of the animal. Good traits could compensate for poorer traits. Linear scoring in contrast describes an animal by assigning a score to a range of anatomical sites on the animal. These sites are grouped into the categories of muscular, skeletal, functional and other. The scoring system is designed to cover the biological range expected

when describing animals in a particular age range. Muscular traits are assigned scores, which under a revised system will range from 1 to 15 while the remainder are assigned scores in the range 1 to 10. Again in conjunction with the various breed Associations, a number of linear scorers are being approved to provide a standardised linear scoring service. These linear scorers will be required to regularly come together and jointly score animals in order to ensure that common standards are being applied.

The linear scoring procedure is also being incorporated into the AI beef bull progeny test programme. Linear score BLUP breeding values are calculated on a routine basis for the participating breeds.

Issued by the Irish Cattle Breeding Federation

Web Address for further details on ICBF activities

www.icbf.com



Beef Bull Performance Test Centre at Tully, Kildare

SUMMARY REPORT OF PERFORMANCE TEST RESULTS FOR BULLS ENDING TEST IN MAY 2003

Evaluations generated and Issued by the Irish Cattle Breeding Federation

NAME OF BULL	BULL NO.	AGE at start	ADG pre test (kg)	ADG on test (kg)	ADJUSTED FINAL WEIGHT 400 days	WITHERS HEIGHT (cm)	ADJUSTED FEED CONV	EYE MUSCLE AREA (cm sq)	FAT AREA (cm sq)	GENETIC GROWTH RATE	INDICES FEED EFFIC- IENCY	FOR CARCASS MERIT	<u>OVERALL</u>	
													BLUP LINEAR MUSCLE	<u>BEEF MERIT INDEX</u>
<u>BLONDE D'AQUITAINE</u>														
KINGDOM TAGHD	R0047	289	1.21	2.05	632	136	4.69	86	1.0	108	112	96	NA	107
<u>BELGIAN BLUE</u>														
GRAIGVEAORISLEY ULICK	R0007	287	.98	2.13	552	124	4.48	109	1.4	95	122	103	NA	106
<u>CHAROLAIS</u>														
LAKEVIEWHOUSE TOGGER	R0022	286	1.29	1.93	648	130	5.51	93	1.1	102	102	109	103	103
BARRACKS TOPMAN	R0043	277	1.43	1.86	691	130	5.20	106	1.8	110	108	122	113	113
MONEYMORE TAB	R0347	260	1.10	1.82	584	127	6.12	99	2.7	90	91	110	92	92
<u>LIMOUSIN</u>														
MILVALLEY TACUMA	R0159	284	1.06	1.93	580	132	5.24	101	1.0	105	107	119	109	109
MOUNT SCOTT TED	R0213	262	1.27	1.76	616	137	5.56	103	1.5	114	102	119	113	112
MOUNT SCOTT TANGO	R0216	262	1.42	1.95	654	135	4.55	95	1.3	122	119	112	128	121
MOLOSKEY TUMPER	R0282	232	1.34	2.05	694	131	5.29	102	1.9	129	106	119	129	122
<u>SALAR</u>														
MOYGARA CASANOVA	R0263	271	.99	1.95	582	128	6.20	98	2.8	97	95	124	NA	101
MOYGARA CASTLE	R0267	270	1.21	2.31	638	135	4.85	89	1.6	109	117	115	NA	115
<u>SIMMENTAL</u>														
KILNURNEY NEO	R0115	266	1.27	2.05	675	131	5.06	102	1.9	108	114	123	110	115
MARBELHILL NIAL	R0143	262	1.28	1.90	664	133	5.80	81	2.5	107	102	97	130	102

IRISH CATTLE BREEDING FEDERATION

NA -> EVALUATIONS NOT AVAILABLE

Beef Bull Central Performance Test - Breeding Details

Issued by the Irish Cattle Breeding Federation

Bull No.	Breed	Bull Name	Earmark	Date of Birth	Sire name H.B. No.	Dam name H.B. No.	MGS name H.B. No.	Owner
R0047	BA	KINGDOM TAGHD	KIG 0203	24/03/2002	EXPLOIT 8189133386	KINGDOM JEWEL KIG J01	WHALOR 4777004079	MICHAEL HEALY CLOGHERANE EAST, LAURAGH, KLLARNEY, KERRY
R0007	BB	GRAIGVEAORISLEY ULICK	GJ V01	26/03/2002	LONG DE WALEFFES 95602751069	BALLYMACSIMON ROSEANNE OCR05	TINTIN DE MY 95601980022	COLM HANRAHAN GARIGUE, RATHOOWNEY, PORTLAIOSE, LACIS
R0022	CH	LAKEVIEWHOUSE TOGGER	ROE-02-003	27/03/2002	PIRATE 7121169140	DRUMLINE JEWEL JFE-J-004	BUNRATTY GARRY MJ-G-001	A & A O'DRISCOLL LAKEVIEW HOUSE, CLASHNACRONA, DUMANWAY, CORK
R0043	CH	BARRACKS TOPMAN	BA-02-013	05/04/2002	BROADLEA PERSIAN CR.99.002	BARRACKS JACINTA BA-J-004	BUNRATTY HAMLET MJ-H-014	JOHN CRAIG KILRODAN, LORRHA, NENAGH, TIPPERARY
R0347	CH	MONEYMORE TAB	KT-02-002	22/04/2002	LYCEEN 8595107406	MONEYMORE NANCY KT-N-001	BOWERHOUST TOPPER GCST004FOT	JAMES J. KELLY THE TWENTIES, DROGHEDA, LOUTH
R0159	LM	MILVALLEY TACUMA	MVYT-159	29/03/2002	HIGHLANDER 1692111209	MILLVALLEY PACIFIQUE MVYP-001	LITRON 1295161096	HELEN NOONAN FERMOY, CORK
R0213	LM	MOUNT SCOTT TED	MTST-213	20/04/2002	MOUNTSCOTT PERCY MTSP-013	LARCHILL PAMELA LCLP-005	DAUPHIN 1988004715	MICHAEL SEXTON AHEYBRIDGE, MULLAGH, CLARE
R0216	LM	MOUNT SCOTT TANGO	MTST-216	20/04/2002	GAMIN 1991010955	MOUNT SCOTT IRENE MTSI-002	BOLIDE 1986007050	MICHAEL SEXTON AHEYBRIDGE, MULLAGH, CLARE
R0282	LM	MOLOSKEY TUMPER	MOLT-282	20/05/2002	GAMIN 1991010955	KNOCKERRA HANNAH KCAH-001	TRAVIS 1982001611	BRENDON CLANCY MULLAGH, CLARE
R0263	SA	MOYGARA CASANOVA	MMK02007	11/04/2002	HERVE 1592082004	RIGEL MIRANDA ET PYE95012	BRUNO 172F6386051716	M & D McKEON MOYGARA, GUREEN, SLIGO
R0267	SA	MOYGARA CASTLE	MMK02009	12/04/2002	LUCKY LUKE 1595044885	JASMINE IMP97015	FOX 1590066745	M & D McKEON MOYGARA, GURTEEN, SLIGO
R0115	ST	KILNURNEY NEO	SGP-N-001	16/04/2002	HILLCREST KING PMN-K-017	CALVESSTOWN KILEEN PIL-L-002	GRETNHOUSE SUPERSO 1063	NOEL O'HANLON GURTEEN, NURNEY, KILDARE
R0143	ST	MARBELHILL NIAL	NAM-N-012	20/04/2002	MARBELHILL LIAM NAM-L-006	AUGHALOORA DAISY GCA-D-007	DRINANEAN NUGGET 1062	PATRICK MANNION LR.KILLASOLAN MOUNYBELLEW BALLINASLOE CO GALWAY