



LRF Test Plan Execution version 24.02

When measured	What to measure	Requirements	How to Submit	Age ranges of Animals	Recommended Slice Groups	EBV's and outputs to be generated
Mating Season	Reproduction records: Mating list information	Record bull in, bull out dates Record all AI, fixed time AI and embryo events Do preg test and record females not in calf, including heifers Submit all mating events for whole herd annually, including disposed (sold, culled or died) animals with DTC disposal codes	Electronically via HerdMaster or the various Society DTC spreadsheets. Please note that there are 4 different templates for submitting information: 1. Natural & AI Joinings, 2. ET Programs, 3. Preg Test Results, 4. DTC Disposal Codes	All serviceable females in mating herd	A maximum three month breeding season recommended. Continuous mating not applicable	Days to Calving (DTC)
Calving	Birth Date & AI date (if applicable)	Record birth date of calf, if it is a AI calf also record the AI date with service code A	With Birth notifications	Best practice: within 24 hours of after birth	45 d	Gestation Length (GL)
	Birth Weight (BW)	Weight				Birth Weight
	Calving Ease Scores	Score 1 (Unassisted) to 6 (Elective Surgical)				Calving ease direct and daughters
TSU (Tissue sample unit) or Hair sample (recommended: early in the life of the animal)	Genotype (SNP test)	Biobank (as per society practices): Send 2 x hair cards (typically 60 hairs each) to society. Ensure follicles are visible. Or send 1 TSU + 1 hair card to society. Ensure tissue sample is visible in tube and that the tube is sealed tightly with solution trapped inside.	Producer submits TSU or Hair samples to society office. Society forwards sample(s) to DNA laboratory when lab request is submitted.	Any time during the life of the animal	n/a	SNP profile; Single-Step EBV's once reference population has been established. SNP parentage verification
Weaning (WW) (200 day)	200-day Weight	Weaning weight	Electronically via HerdMaster or Society Excel spreadsheet	80 to 300 days	45 d	200 day weight 200 day Milk (first two records analysed)
	Sheath/Naval	Score from 1 (pendulous) to 9 (clean)		80 to 300 days	45 d	Sheath/Naval (Research)
	Docility	Score: All breeds (except Brahman): 1 = docile to 5 = aggressive Brahman: 1 = aggressive to 9 = docile		80 to 300 days	45 d	Docility
	Mature Cow Weight (MA)	Weigh cows when calves are weighed for 200-day weights (within 2 weeks from when calves are weighed) Minimum age of cows at weighing: Temperate breeds (2.4 years / 870 days), Tropical breeds (3.0 years /1090 days) First valid MCW needs to be taken before 6 years of age (2200 days). Otherwise, MCWs are never analysed for cow		870 to 3900 days	360 d	MCW (first four valid records analysed)
	Body Condition (BC)	Score cows for BC at time of MCW measurement (preferably at wean) Score from 1 (Emaciated) to 9 (extremely Fat)		870 to 3900 days	360 d	Adjusted MCW (Research)
	Hip Height of the cow (HH)	Hip Height of the cow. Needs to be accompanied by a weight.		870 to 3900 days	360 d	Frame score (Research)
Yearling (YW) (400 day)	400-day weight	Weight	Electronically via HerdMaster or Society Excel spreadsheet	301 to 500 days	60 d	400-day weight
	Scrotal Circumference	Scrotum circumference (cm to one decimal place) together with a weight. Preferably taken with 400-day weight. Should be taken when bull group start to reach puberty.		300 to 700 days	60 d	Scrotal Size (only first measurement analysed)
	Hip Height (HH)	Hip height in cm. Needs to be accompanied by a weight.		300 to 800 days	60 d	Frame score (Research)
Ultrasound scanning	Carcass traits	Accredited scanner to do scanning. Animals should be in a good condition and ideally have: Min average rump fat depth of 4-5 mm, Min average rib fat depth of 3 mm.	Data to be given to producer. Submits RTU data to Society within 24 hours, electronically via HerdMASTER or Society Excel spreadsheet	300 to 800 days	60 d	Carcass weight, Eye-muscle-area, rib-and rump fat, % retail-beef-yield, intramuscular-fat
	Scrotal Circumference	Scrotum circumference (cm to one decimal place) together with a weight.		300 to 700 days	60 d	Scrotal Size (only first measurement analysed)
	Hip Height (HH)	Hip height in cm (for bulls and females)		300 to 800 days	60 d	Frame score (Research)
18 months (FW) 600 day	600-day weight	Weight	Electronically via HerdMaster or Society Excel spreadsheet	500 to 900 days	60 d	600-day weight
	Scrotal Circumference (if not measured at 400-day weight)	Scrotum circumference (cm to one decimal place) together with a weight.		300 to 700 days	60 d	Scrotal Size (only first measurement analysed)
NFI test	Net Feed Intake	Calan gate: 28 day adaptation, followed by 84 days testing. GrowSafe or similar: 10 day minimum for pen adaptation; 21 day minimum for rumen adaptation, followed by 49 days testing for shorter test or 70 days testing for longer test. Sernick: 28 day adaptation followed by 84 days testing. Minimum recommended contemporary group size of 5 animals with a minimum of two sires' progeny per group (recommended that one sire is a link sire). Weight requirements: At start of test: min. 120kg and max. 600kg. End of test: min 200kg and max. 800kg. Refer to LRF test protocol for further details	Results to be submitted to Society by test station in correct format (ILR2). In the case of GrowSafe test stations: GrowSafe submit results to the LRF office, which sends the results to the society.	210 to 700 days at start of test. The LRF however recommended the following: Minimum age of 210 days at start of adaptation or such higher age to ensure animals are at least 300d days of age at end of test to enable collection of SS and RTU Scan data.	60 d	NFIp (post wean) or NFI (feedlot finishing); dependent on age of animal at testing.
Abattoir records & Image scanning	Live weight; Fat depth (Rib); Carcass weight; Dressing %; Hump height; Optional:-Meat & fat Colour; IMF% (1 - >12 %);PH & Temperature	Minimum contemporary group size of 5 animals with a minimum of two sires per group (one sire should be a link sire). Animals can be from a NFI test group, on farm or natural pastures. Must be a contemporary group fed through life in same conditions until age of cull. To be done by abattoir and/or image scan operator.	Data submission by abattoir & scan operator to Society	300 to 1000 days Cull age determined by best breed based on best finishing age for breed and finishing system.	60d	Carcass weight Fat depth (mm), Rib and Rump Marbling % % Fineness EMA Fat colour (Research) Meat colour (Research)

Meat lab	Fat depth (Rib); Meat & fat Colour; IMF% (1 - >12 %); pH & Temperature; Warner-Bratzler (tenderness) Optional: Fatty acid profiles	Minimum contemporary group size of 5 animals with a minimum of two sires per group (one sire should be a link sire). Animals either be from a NFI test group, on farm or natural pastures. Must be a contemporary group fed through life in same conditions until age of cull.	Data submission by meat lab to Society. Meat sample for meat lab to be collected, marked and packed to meat lab	300 to 1000 days Cull age determined by each breed based on best finishing age for breed and finishing system.	60d	Eye Muscle Area Rib fat % inter-muscular-fat Tenderness Fat colour (Research) Meat colour (Research) Fatty Acid Profiles (Research)
ADDITIONAL RESEARCH DATA RECORDED (for breeders that would like to participate in recording for research purposes)						
From weaning to 24 months of age	Age at puberty	Use of Allflex Sensehub measurements on heifers to identify age at puberty	to be determined	From weaning to 24 months of age	tbd	Improvement of DTC EBV (Research)
From calving to actual measurement	Lactation anoestrus	Use of Allflex Sensehub measurements on cows (recommend first calvers)	to be determined	870 to 3900 days	tbd	Improvement of DTC EBV (Research)
At fertility test of bull	Semen quality	Veterinary report on semen quality (standard to be developed by LRF)	to be determined	tbd	tbd	Semen quality EBV

- Weight, measure or score in as large as contemporary groups as possible; preferably weigh less often but in larger groups.
- Have as short a mating season as possible (45-90 days) to improve your genetic rate of gain (especially reproduction).
- Record all animals treated differently with a performance code for example sick or show animals. Any 3 letter code will work.
- Weigh, measure or score before splitting animals into different groups, for example wean the group then split them into a show string or sale animals.
- Weigh, measure or score all animals including culls. Selective recording produces wrong EBVs.
- Sheath/Naval and docility do not necessarily have to be scored on the same date as weaning date. See society instruction for scoring procedure.
- Only the first two weights submitted for each animal are accepted for 200-, 400-, and 600-day weights.
- Only the first scrotal measurement is accepted either at 400- or 600-days or within the age range specified (400 day is recommended). The actual weight on that date is essential.
- Make special arrangements if your contemporary group extends beyond 31 December and you want to include them in the same contemporary group as previous year.



NOTE



All items marked in Brown for action by Breeder

LR/ BREEDPLAN TEST PLAN to promote total herd testing for Completeness of Information Recording