Form BEEF

DESCRIPTION OF BEEF NATIONAL GENETIC EVALUATION SYSTEM

Country (or countries) Spain

Trait name: Weaning weight

DATA COLLECTION

Breed(s)	Limousin
Trait definition	Weaning weight as weight at 210 days
Method and frequency of measurement	Chest circumference for birth weight. Scale for lactation weights taken every three months up to the moment of weaning.
Who does the performance recording?	Breeders and breed associations technicians
Method of collecting data	Birth weight with a method of chest circumference (explain in inform of trait of birth weight). Lactation and weaning weight with scale in Kg.
Which animals get recorded?	Pure breed
Is birthday recorded?	Yes
Is day of recording available?	Yes
Are the data adjusted and/or selected? If yes please describe the methodology applied	Yes, weight records are adjusted at 210 days using individual lineal regression .
Time period for inclusion of records	Since 1989
Criteria (data edits) for inclusion of records	Limits for days: From birth to 300 days. Limits for weight gain: 0,0 - 2,5 Kg/day. One weight after 60 days of age, and a minimun o 2 weight are adjusted
Is embryo transfer applied? How are ET animals been identified?[1] Is recipient mother ID recorded?	No
How do you treat incomplete data?	Discarded according to the above mentioned criteria.

MODEL

Model used for genetic evaluation[2a]	ST- AM-DAM-MPE
Environmental effects[2b]	GC ,2694,(F) + SEX,2, (F) + DamAge,4,(F) + MPE, 9668, (R)

Use of genetic groups and relationships	Relationship are used, but group genetics are not used.
Genetic parameters in the model 3	
Adjustment for heterogeneous variance in evaluation model	No
System validation	A bayesian analysis was done comparing different models depending of his predicitve capacity and his goodness of fit. The best result was obtained for this model.
Definition of genetic reference base Next base change	Animal born in 1997. Next base, animal born in 2002.
Assessment of index quality (computation of reliability, connection)	REL = 1 - (SD**2 / ((1+Inbreeding coefficient)* Variance)) Variance direct or maternal respectively.

PUBLICATION

Expression of genetic evaluations	EBV
Criteria per official publication of evaluations	1. Bulls: Weaning Weight -Direct:≥ 60% reliability, - Maternal: ≥ 50% reliability.2. Young bulls (15-36 months old and without offspring): 25% higher Breeding Value for Weaning Weight-Direct3. Cows: Best 50 cows for Weaning Weight breeding value. (Two lists, for Direct and Maternal components)4. Star Cows: Cows with breeding values above the 75 (one star), 90 (two stars) and 99 (stars) percentiles for each trait evaluated, listed by owner.
Number of evaluations / publications per year	One
Anticipated changes in the near future	Use of genetic group and heterogeneous variance.
Key reference on methodology applied	http://www.razalimusin.org/
Key organization: Contact person, address, phone, fax, e-mail, website	Pedro Pozas De Miguel C/ Lagasca nº 70. 28001Madrid, Spain. Phone: +34915771853, Fax: +34915771776 secretariotecnico@razalimusin.org

1) Use Appendix II BEEF for sample ID of ET animals

2a) Use abbreviation listed in the attached list of abbreviation to define the type of model.

2b) Use abbreviation for most common effects as listed in the attached list of
   abbreviation indicating, also, if the effect is treated as random (R) or fixed (F).

3) Use Appendix I BEEF for heritability/genetic variance estimates.

Parameters used in genetic evaluation

Country: Spain
Main trait group: Weaning Weight
Breed: Limousin

Trait(1) Definition	h_d^2	h_m^2	$r_{g(d,m)}$	c^2	σ^2_p
Weaning ¨Weight	0,26	0,13	-0,2	0,08	541.45

h_{d2} : direct heritability; h_{m2} : maternal heritability; $r_{g(d,m)}$: genetic correlation between direct and maternal effects; c_2: repeatability of (maternal) permanent environmental effects; σ_{p2}: phenotypic variance.
1) If you have more than one trait provide the correlations between traits.

Form BEEF

Sample of ET animal IDs

Country:
Main trait group:
Breed:

ET animal ID

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