

Country

Ireland

Trait category:

Individual trait(s):

Reproduction-calving

Calving performance (direct)

Stillbirth (direct)

Gestation length (direct)

Workability

Milking speed

Temperament

Conformation

Udder

Locomotion

Other

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IRELAND

Reproduction calving traits	Calving performance (direct) Stillbirth (direct) Gestation length (direct)
Breed	Holstein Friesian
Trait definition and unit(s) of measuring	Calving performance is scored in 4 categories; no assistance (1), some assistance (2), serious difficulty (3), dead within 48 hours after birth (4). In the analysis 3 traits are identified and evaluated separately; percentage of records with score 2, percentage of records with score 3, percentage of records with score 4 (stillbirths and deaths within 48 hours of birth) Gestation length is calculated as the number of days between insemination and calving/birth date. Records not falling within plus/minus 15 days of the breed mean are deleted from the data
Method of measuring and collecting data	Scored by farmer or AI service technician
Time period for data inclusion	Since 1977
Age groups	1 st parity and $\geq 2^{\text{nd}}$ parity
Genetic parameters	$h^2_{\text{calving performance (direct)}} = 0.06$ $h^2_{\text{stillbirth (direct)}} = 0.06$ $h^2_{\text{gestation length (direct)}} = 0.16$
Sire categories	All AI-bulls
Environmental effects pre-adjustment evaluation model	Parity of cow, breed of cow Year x AI-station, sex of calf, breed of sire
Base for age adjustment	Average of parities ≥ 2
Use of genetic groups and/or relationships	None
Method (model) of genetic evaluation	ST BLUP SM
System validation	-
Expression of proof	EBV _{some assistance} with M = 10% and SD = 3.0 EBV _{serious difficulty} with M = 1.5% and SD = 1.1 EBV _{stillbirth} with M = 1.7% and SD = 0.8 EBV _{gestation length} with M = 282 and SD = 0.8
Genetic (reference) base	Based on rolling breed mean of 15 years
Criteria for official publication of sire proofs	≥ 160 calvings
Number of evaluations/ publications per year	One; March
Use in total merit index	No
Key reference on methodology applied	-

Workability traits	Milking speed Temperament
Breed(s)	Holstein Friesian
Trait definition and unit(s) of measuring	Milking speed is scored from slow (1) to fast (5) Temperament is scored from easy (1) to difficult to handle (5) during milking
Method of measuring and collecting data	Scored by farmer and collected by assessor
Time period for data inclusion	Since 1993
Age groups	Heifers
Genetic parameters	$h^2_{\text{milking speed}} = 0.20$ $h^2_{\text{temperament}} = 0.15$
Sire categories	All AI-bulls
Environmental effects pre-adjustment evaluation model	Age at calving, date of calving, stage of lactation Herd x year x AI-station
Base for age adjustment	26 months
Use of genetic groups and/or relationships	Grouped by percentage Holstein Genes Sire relationships
Method (model) of genetic evaluation	ST BLUP SM
System validation	-
Expression of proof	ETA with $M = 0$ and $SD = 1$, higher values indicate faster milking and difficult to handle, respectively
Genetic (reference) base	Mean of evaluated animals
Criteria for official publication of sire proofs	≥ 15 effective daughters
Number of evaluations/publications per year	One; March
Use in total merit index	No
Key reference on methodology applied	-

IRELAND

Conformation traits	Udder:	fore udder attachment, rear udder height, udder support, udder depth, teat placement-rear view, teat placement-side view, teat length
	Locomotion:	rear legs-side view, foot angle
	Other:	stature, chest width, body depth, angularity, rump angle, rump width, muscularity

Breed(s)	Holstein Friesian
Trait definition and unit(s) of measuring	All traits are scored on a linear 1-9 point scale, following recommendation of the European and World-wide group for harmonization of linear type classification, except for stature, udder depth, teat placement and muscularity, which are different
Method of measuring and collecting data	Scored by classifier
Time period for data inclusion	Since 1984
Age groups	Heifers
Genetic parameters	$h^2_{\text{udder traits}} = 0.20 \text{ to } 0.25$ $h^2_{\text{locomotion traits}} = 0.15$ $h^2_{\text{other traits}} = 0.20 \text{ to } 0.25$
Sire categories	All AI-bulls
Environmental effects pre-adjustment evaluation model	Age at calving, date of calving, stage of lactation Herd x year x AI-station
Base for age adjustment	26 months
Use of genetic groups and/or relationships	Grouped by percentage Holstein Genes. Sire relationships
Method (model) of genetic evaluation	ST BLUP SM
System validation	-
Expression of proof	ETA with $M = 0$ and $SD = 1$
Genetic (reference) base	Mean of evaluated animals
Criteria for official publication of sire proofs	≥ 15 effective daughters
Number of evaluations/publications per year	One; March
Use in total merit index	No
Key reference on methodology applied	-