COUNTRY'S NAME	IRELAND
Production traits	**Milk, fat and protein**
Breed	HOLSTEIN
Trait definition and unit of measurement	Direct: Milk, fat and protein yield (kg), Indirect: Fat and protein (%) from average adjusted values for yield traits. Source – authenticated lactation records in official milk recording; ICAR methods A4, A6 or A8.
Criteria for inclusion & extension of records	Records with non-identified sires are excluded. Lactations in progress (only in the first lactation) for at least 150 days are truncated using a function of last test-day yield. Naturally completed lactations and records of culled cows of less than 305 days are included if they have a minimum of 4 tests and lactation length is at least 150 days for cows that have gone dry or at least 200 days for lactations ended for other reasons. No extension for complete lactations.
Time period for data inclusion	Calving since 1971 (no limit for pedigree)
Sire categories	All sires (including ET): NS, AI and imported semen
Number of lactations included in the evaluation	5 (Cows with missing first lactations do not contribute to sire proofs). Weightings: recording method A4 A6 A8 First 1.00 0.90 0.80 Later 0.80 0.72 0.64
Environmental effects: Pre-adjustment	Multiplicative adjustments for lactation number and calving date, followed by Additive adjustments for mean calving age at parities 1-5, calving interval (previous and current) and heterosis/recombination (scaled by the ratio of herd mean to population mean), followed by Adjustment for heterogeneity of variance (using method suggested by Brotherstone and Hill (1986), Anim. Prod. 42:297). Adjustment factors last updated in 1992.
Base for age pre-adjustment	Calving age: 27, 40, 52, 64 and 76 months for parities 1-5, respectively.
Method (model) of genetic evaluation	ST – R – BLUP – AM
Environmental effects in the genetic evaluation model	Fixed: Herd*year*season Random: Herd*sire, PE
Use of genetic groups	Unknown parents grouped by year, by four selection paths and by country of origin (foreign countries collected in two groups: GBR/NZL and others)
Genetic parameters in the evaluation	h^2=0.35, t=0.55, c^2=0.16, herd*sire=0.04
System validation	Animal identity and ancestry checks, DNA checks on sample of progeny, information on lactation records checked against herdbook, birth dates of progeny checked against those of parents, range limits for yield and % figures, for age at calving and for calving interval. Time trends in proofs, changes in individual proofs.
Expression of genetic evaluations	PD (kg, %)
Genetic (reference) base **Next base change**	Fixed, Cows born in 1990 February 2000
Criteria for official publication of evaluations	Minimum REL 70%. Minimum of 15 daughters and 5 herds. Not more than 30% daughters in the herd with most daughters.
Number of evaluations / publications per year	1/1, February
Use in production / total merit index	RBI95 = 100 + 0.36*PD95 fat kg + 1.64*PD95 protein kg -0.014*Pd95 Milk kg + 74*PD95 protein %
Anticipated changes in the near future	Projection of all lactations to 305 days. Evaluation model, adjustment factors and genetic parameters are being revised at the same time. Two evaluations per year (February and August) starting in August 2000.
Key reference on methodology applied	Wiggans, G.R., Misztal, I. and Van Vleck, L.D. 1988. Implementation of an animal model for genetic evaluation of dairy cattle in the United States. J. Dairy Sci. 71 (Suppl. 2): 54
Key organization: name, address, phone, fax, e-mail, web site	Irish Cattle Breeding Federation Society Ltd Shinagh House, Bandon Co. Cork, Ireland Telephone: 353-23-20222; Fax: 353-23-20229 e-mail: aeu@icbf.com

COUNTRY: Ireland

Number of AI bulls (NB) tested, means (X), and standard deviations (SD) of proofs (kg, %) from most recent run, by bulls' year of birth (YB) and breed.

		Milk		Fat		Protein		Fat %		Protein %	
YB	NB	X	SD	X	SD	X	SD	X	SD	X	SD
Breed						Holstein Friesian					
1982	37	-142	140	-4.9	4.7	-4.1	3.5	0.01	0.08	0.01	0.04
1983	33	-87	219	-2.2	6.7	-2.8	5.6	0.02	0.09	0.00	0.05
1984	48	-21	240	-0.7	7.4	-0.6	6.7	0.00	0.09	0.00	0.05
1985	39	-15	169	-0.4	5.7	-0.4	4.6	0.00	0.09	0.00	0.04
1986	37	-35	187	-0.9	5.5	-0.9	5.6	0.01	0.10	0.00	0.05
1987	37	52	139	2.5	5.3	1.6	4.3	0.01	0.06	0.00	0.04
1988	41	123	191	6.8	6.1	4.7	5.0	0.04	0.10	0.01	0.05
1989	40	175	209	7.9	6.5	5.8	5.4	0.03	0.10	0.00	0.05
1990	37	157	210	5.9	6.9	5.5	5.9	0.00	0.12	0.01	0.06
1991	34	306	189	10.4	6.6	9.7	6.2	-0.02	0.10	0.00	0.05
1992	63	385	239	11.0	7.2	11.6	6.4	-0.06	0.11	-0.01	0.05
1993	70	436	195	13.2	6.7	12.8	5.1	-0.05	0.13	-0.02	0.05

COUNTRY: Ireland

Average of adjusted production records (kg, %) included in the most recent evaluation run, by daughters' year of calving (YC) and breed.

	Milk		Fat		Protein		Fat %		Protein %	
YC	X	SD	X	SD	X	SD	X	SD	X	SD
Breed					Holstein Friesian					
1986	4835		175		155		3.62		3.22	
1987	4861		178		155		3.66		3.20	
1988	4822		176		154		3.66		3.20	
1989	4950		181		159		3.66		3.21	
1990	5058		186		163		3.69		3.23	
1991	5065		188		164		3.73		3.24	
1992	5155		192		168		3.74		3.27	
1993	5145		190		168		3.69		3.27	
1994	5245		194		171		3.71		3.28	
1995	5212		194		169		3.72		3.24	
1996	5196		193		169		3.72		3.26	
1997	5218		195		170		3.74		3.26	