

**FACTS ON SIRE EVALUATION PROCEDURES APPLIED FOR
PRODUCTION TRAITS**

COUNTRY: DENMARK

Breed(s)	<i>[I]</i> Danish Jersey <i>[III]</i> Danish Black and White, Danish Red, Danish Red and White
Trait(s) evaluated and unit(s) of measurement	Milk, fat and protein (kg)
Number of lactations	1
Genetic parameters assumed	h^2 :milk=0.29; fat=0.27; protein=0.30 c=0.10
Criteria for inclusion and extension of records	Culled cows: <46 days not included, 46-305 days included after extension. In progress: Extended, but given less weight than completed records
Sire categories evaluated	All sires with first batch of daughters
Environmental effects considered by pre-adjustment	Age, season, herd, DO
by evaluation model	-
Base for age adjustment (months)	<i>[I]</i> 26 months; <i>[III]</i> 28 months
Use of genetic groups and/or relationship	All pedigree information included
Method of evaluation	Direct updating
Expression of proof	RBV
Genetic (reference) base	Rolling, the average of bulls from the first batch of daughters with an Y-index (100+sum of milk-,fat- and protein-index-100) with a Rpt \geq 60%, until the remaining daughters that have calved, but not terminated their lactations, can not improve the repeatability by more than one per cent.
Criteria for official publication of sire proofs	Rpt \geq 60%
Number of evaluations/publications per year	-
Use of production index	Total merit index used
Name, address and faxnumber of organization responsible for sire evaluation and publication	National Committee on Danish Cattle Husbandry Udkaersvej 15, DK-8200 Aarhus N Denmark Tel: +45 86109088 Fax: +45 86109700
Key references on methodology applied	Christensen, L.G., 1984. Direct updating of breeding values. IDF/EAAP Symp. on progeny testing methods in dairy cattle, Prague. Sept. 14-16. Doc. 183, 33-47.

COUNTRY: DENMARK

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

		Milk		Fat		Protein		Fat %		Protein %	
YB	NB	X	SD	X	SD	X	SD	X	SD	X	SD
Breed:		Danish Black and White									
1976	121	81.2	8.9	83.1	8.2	82.8	8.0				
1977	146	84.1	9.6	86.3	7.9	86.4	8.2				
1978	163	84.9	8.1	86.2	7.5	86.5	7.0				
1979	179	90.4	8.4	89.8	7.8	91.3	7.3				
1980	181	92.7	7.7	91.0	7.5	91.7	6.8				
1981	217	92.8	7.8	95.1	7.5	93.8	7.0				
1982	257	94.0	7.6	97.0	6.8	94.8	6.8				
1983	233	97.6	7.6	98.8	7.6	97.8	6.8				
1984	292	98.7	8.2	99.3	6.9	98.5	7.1				
1985	286	99.7	8.3	100.3	6.9	99.7	6.7				
1986	321	99.5	8.0	99.4	7.7	99.7	6.9				
1987	165	101.4	7.3	100.7	7.6	101.9	6.2				
Breed:		Danish Jersey									
1976	42	89.5	8.1	91.0	8.0	91.4	7.4				
1977	46	93.6	7.7	94.3	6.5	94.7	6.2				
1978	60	93.4	7.8	93.9	5.4	94.5	5.0				
1979	60	93.1	7.3	95.4	5.4	95.0	6.0				
1980	66	93.1	7.9	98.2	6.8	96.1	7.0				
1981	62	94.6	7.2	100.2	6.5	96.8	6.3				
1982	66	95.0	7.1	99.9	5.2	96.7	6.5				
1983	94	97.6	8.1	100.7	6.4	98.5	6.5				
1984	88	97.1	6.7	100.5	5.7	98.3	6.2				
1985	85	94.2	7.7	99.0	6.0	97.1	6.8				
1986	88	97.7	9.4	99.5	5.7	98.5	6.7				
1987	51	103.2	9.4	99.9	6.4	102.7	7.2				
Breed:		Danish Red									
1976	46	90.6	7.2	90.0	5.9	90.3	6.7				
1977	61	93.8	7.6	93.7	6.4	93.7	6.7				
1978	60	92.1	8.3	91.2	7.6	92.5	7.2				
1979	71	94.5	7.9	92.4	7.2	94.6	7.1				
1980	79	94.2	7.1	94.3	7.2	94.7	6.6				
1981	90	95.9	6.5	95.8	7.1	97.1	6.5				
1982	90	96.0	7.7	96.6	6.8	97.0	6.7				
1983	72	100.2	6.0	98.9	5.9	98.6	5.4				

COUNTRY: DENMARK											
Number of AI bulls (NB) tested, means (X) and standard deviations (SD) of proofs (RBV) from most recent run, by bull's year of birth (YB) and breed											
		Milk		Fat		Protein		Fat %		Protein %	
YB	NB	X	SD	X	SD	X	SD	X	SD	X	SD
1984	94	100.7	7.0	100.2	6.9	99.9	6.7				
1985	85	100.2	7.5	101.0	7.2	101.4	6.4				
1986	69	99.1	7.3	99.4	6.3	99.6	6.1				
1987	44	101.3	7.3	101.8	6.7	101.2	6.4				

COUNTRY: DENMARK						
Average of adjusted production records (kg) included in the most recent evaluation run, by daughters' year of calving (YC) and breed						
YC	Milk		Fat	Protein	Fat %	Protein %
Breed:	Danish Black and White					
1978	4676		188			
1979	4824		194			
1980	4822		192			
1981	4735		189			
1982	4782		192			
1983	5052		204			
1984	5175		207			
1985	5654		225			
1986	5973		240	196		
1987	6158		249	200		
1988	6195		250	200		
1989	6228		250	202		
1990	6285		263	205		
Breed:	Danish Jersey					
1978	3444		217			
1979	3534		227			
1980	3580		224			
1981	3455		211			
1982	3519		216			
1983	3620		222			
1984	3681		224			
1985	3818		237			
1986	4086		255	161		
1987	4135		260	161		
1988	4155		250	161		
1989	4195		262	165		
1990	4299		272	171		

COUNTRY: DENMARK

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

YC	Milk	Fat	Protein	Fat %	Protein %
Breed:	Danish Red				
1978	4642	194			
1979	4820	202			
1980	4791	199			
1981	4675	194			
1982	4769	198			
1983	4972	207			
1984	5120	212			
1985	5409	224			
1986	5760	238	200		
1987	5900	246	203		
1988	5876	245	202		
1989	5947	247	204		
1990	5975	254	207		