

Explanation of Genetic Herd Inventory Reports

Canadian Dairy Network (CDN) is responsible for the calculation and publication of genetic evaluations for all dairy breeds in Canada. The attached Genetic Herd Inventory provides the most recent genetic evaluation for each animal on the milk recording herd inventory and includes genetic indexes for cows and Parent Averages for heifers and cows whose own records were not available for the most recent genetic evaluation calculation.

Cows and Heifers Listed

Animals included on the Genetic Herd Inventory report are those that were on the herd inventory at the time of the milk recording test date indicated on the report. Genetic evaluations provide an indication of the animal's superiority or inferiority as the dam of future heifers or bulls.

Data Used

Over 50 million test day records since the early 1990s that qualify for use in genetic evaluations have been combined with generations of pedigree information in order for the attached genetic evaluations to be calculated. For type, first lactation classifications since 1993 are used for Holsteins whereas first lactation classifications dating back to the early 1980s are used for the other breeds.

Publishable Versus Unpublishable Cow Indexes

Production indexes for individual cows are publishable on top cow lists and pedigrees as well as promotional material provided the minimum standards are met. These standards include criteria associated with the amount of supervised testing as well as at least one test after 60 days in milk. Unpublishable cow indexes are provided for herd management and mating purposes and are clearly indicated on the report. Animals with a Parent Average for LPI and/or production are indicated with a "PA" label.

Herd Averages by Breed

For each breed of animal on the report, separate averages are provided for cows versus animals with PAs in addition to averages for the combined group. Comparative national averages based on all active cows are also presented, as available on the CDN web site.

Information Provided

For each animal, the following information is provided:

Animal Name or Chain #:	The animal's barn name or chain number.
Animal REG #:	The animal's registration number.
SIRE:	The sire's short name or registration number.
% INBR:	Animal's level of inbreeding (%)
AGE (YY-MM):	Age of animal at the time of the most recent genetic evaluation publication.
PUBLISHABLE:	Indicates a "Publishable" genetic index versus those for management.

(See illustration on page 2)

Lifetime Profit Index (LPI):

LPI Code:	Indicates LPI values based on Parent Averages (PA) instead of genetic indexes.
LPI:	A genetic selection index provided for bulls, cows, heifers and young sires representing the expected lifetime profitability of future daughters. The LPI combines the three components of Production, Durability and Health & Fertility into a single value.
LPI %RK:	The percentile rank for LPI.

Production Genetic Information:

PROD Code:	Indicates production evaluations that are Parent Averages (PA) instead of genetic indexes.
MILK KG:	Animal's genetic evaluation for milk yield in terms of kilograms. The evaluation is expressed as an estimated breeding value (EBV) or Parent Average (PA), reflecting the animal's genetic potential, half of which is passed on to her progeny.
MILK %RK:	The percentile rank for milk yield. Percentile rank values indicate the percentage of the active cow population that ranks below this animal (ex: the 95 th percentile indicates that the animal is in the top 5% of the breed).
FAT KG:	Animal's genetic evaluation for fat yield in terms of kilograms, expressed as an EBV or PA.
FAT %RK:	The percentile rank for fat yield.
FAT %:	The genetic evaluation for fat percent deviation in terms of EBV or PA.
PROTEIN KG:	Animal's genetic evaluation for protein yield in terms of kilograms, expressed as an EBV or PA.
PROTEIN %RK:	The percentile rank for protein yield.
PROTEIN %:	The genetic evaluation for protein percent deviation in terms of EBV or PA.
SCS:	The genetic evaluation for somatic cell score (below 3.00 is desirable).

Type Genetic Information:

CONF:	Animal's EBV or PA for Conformation.
CONF %RK:	The percentile rank for Conformation.
MS:	Animal's EBV or PA for Mammary System.
F&L:	Animal's EBV or PA for Feet & Legs.
DS:	Animal's EBV or PA for Dairy Strength.
RP:	Animal's EBV or PA for Rump.

January 2008 – Comparison between the previous and the new layout

Before

Genetic Herd Inventory

November 2006



NAME: Patrick Producer
 HERD NUMBER: QC 99999
 PAGE: 1 of 2
 TEST DATE: 10 Jan 2007
 SERVICE: Supervised

Cow Name	Cow Registration #	Sire Registration #	Publ Ind	% INBR	Birth Date	Last Calving Included	DIM	# Lact	# TDR	REL	% RK	Milk kg	% RK	Fat kg	Fat %	% RK	Prot kg	Prot %	SCS	REL	% RK	CONF	% RK	LPI
A	HOCANF	3 HC	3	4.83	15 Oct 02	24 Mar 06	165	2	15	62	40	79	69	21	0.18	48	7	0.04	3.00	43	31	2	27	-22
A	9 HOCANF	HC		6.22	06 Sep 98	16 Aug 01	287	2	17	65	58	393	16	-16	-0.30	44	5	-0.07	2.95	48	25	1	31	51
E	4 HOCANF	HC		3.05	03 Sep 01	17 Dec 05	262	3	29	68	69	605	39	2	-0.19	74	20	0.00	3.30	45	36	2	33	85
E	HOCANF	5 HC		5.94	10 Nov 02	22 Dec 05	224	2	17	64	28	-158	94	48	0.54	40	3	0.07	3.04	46	31	2	62	491
E	HOCANF	HC		3.99	17 Nov 01	06 Aug 06	30	3	20	65	79	830	91	43	0.14	85	28	0.01	3.29	46	18	0	63	508

After

GENETIC HERD INVENTORY

January 2008



NAME: Frederic Producer
 HERD NUMBER: QC 888888
 PAGE: 1 of 3
 TEST DATE: 17 Jan 2008
 SERVICE: Non Supervised

Cow Name	Animal Registration #	Sire	% INBR	Age YY-MM	Publishable	LPI Code	%RK	Prod Code	Milk kg	%RK	Fat kg	%RK	%	Protein kg	%RK	%	SCS	CONF %RK	MS	F&L	DS	RP
	HOCANF			-	PUBL																	
	HOCANF			-	PUBL																	
	HOCANF			-	NON PUBL																	