



A trusted source for accurate genetic information

Official Holstein Pedigrees combine ancestry, performance and genetic information all into one easy-to-use document. Whether you are making mating decisions or trying to decide which sale animal might have a place on your operation, Official Holstein Pedigrees give you the information and details you need on the animals you are working with.

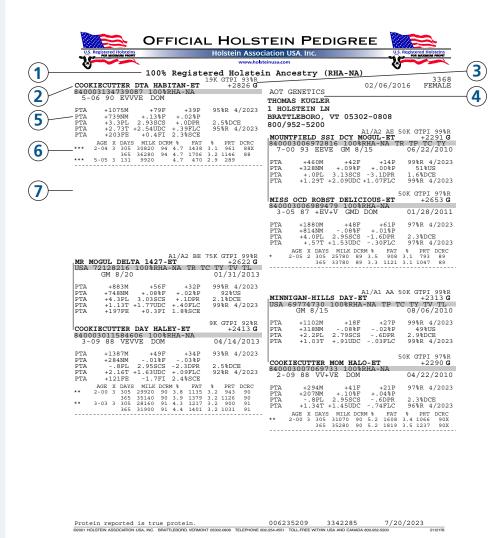
Official Holstein Pedigrees also serve as a verified source of genteic, production and ancestry information when you are selling animals, allowing you to provide trusted documentation to potential buyers; the first step to satisfied, repeat customers!

Read with ease, evaluate with confidence

Official Holstein Pedigrees contain a wealth of important information on a single page. While each animal is different, their information is all presented in the same format, making it easy to evaluate and compare animals.

Official Holstein Pedigrees provide multi-generation details and performance information on Registered Holsteins of all ages.

How to Read an Official Holstein Pedigree



Information included on an Official Holstein Pedigree:

1.100% Registered Holstein Ancestry (RHA-NA)

The first line, centered on a pedigree, shows the **percentage Registered Holstein Ancestry (RHA)** and whether the animal is of an entirely North American (RHA-NA) blood-line or has some International ancestors (RHA-I).

2. COOKIECUTTER DTA HABITAN-ET 840003134739087 100%RHA-NA 5-06 90 EVVVE DOM

The first information block on the left side of a pedigree provides you the animal's complete **identification and classification information**. You will see the animal's name, country of origin of the identification, registration number, %RHA information and any genetic condition codes that are on file with the Holstein Association.

Genetic Codes

- BD Bulldog¹
- BL Bovine Leukocyte Adhesion Deficiency (BLAD)¹
- TL Tested free of BLAD
- BY Brachyspina¹
- TY Tested free of Brachyspina
- CD Cholesterol Deficiency1
- TC Tested free of Cholesterol Deficiency
- CV Complex Vertebral Malformation (CVM)¹
- TV Tested Free of CVM
- DP Deficiency of Uridine Monophosphate Synthase (DUMPS)¹
- TD Tested free of DUMPS
- MF Mule-Foot1
- TM Tested free of Mule-Foot
- PO Observed Polled²
- PC Tested Heterozygous Polled²
- PP Tested Homozygous Polled²
- TP Tested free of the Polled Condition (horned)
- RC Recessive Red Carrier¹
- B/R Black/Red Coat Color¹
- TR Tested free of Recessive Red
- DR1 Tested Heterozygous Dominant Red²
- DR2 Tested Homozygous Dominant Red²

¹Recessive gene carrier

²Dominant gene carrier

Classification information is found under the animal's registration number. It includes the age of the animal at classification, final score and major classification categories. The five categories are Front End/Capacity, Dairy Strength, Rump, Feet & Legs, and Udder. Cows with classification scores that were received prior to December 2004 are underlined, and represent the following categories: Frame, Dairy Character, Body Capacity, Feet & Legs, and Udder. If an animal has been classified Excellent in more than one age category, a multiple E designation may appear on this line after major category designations. Recognition as a Gold Medal Sire (GM), Gold Medal Dam (GMD) or Dam of Merit (DOM) will be found on this line as well.

3. A1/A2 BE 75K GTPI 99%R +2622 G

TPI® (Total Performance Index) values appear on the same line as the name. TPI is a selection index based on a balance of traits to assist Holstein breeders by sorting out animals that possess genes which will enhance the overall quality of the Holstein breed. There are different types of TPIs you will find on pedigrees:

The TPI value is preceded by a percentile ranking of P5 through P9 for the top 50% of animals born within a given year of birth, for animals less than three years old. For example, P9 animals are in the 90th percentile for the birth year, P8s are in the 80th percentile, etc.

For genomic-tested animals, you will find an indicator of which SNP density chip they were tested on (ex: 19k). After the TPI indicator is the TPI reliability value. If an animal has genetic test results for Beta Casein or Kappa Casein milk proteins, they will appear on this line, to the left of the genomic chip density indicator. Examples of these labels can be seen on the paternal ancestors on this pedigree.

3368 02/06/2016 FEMALI

AOT GENETICS

THOMAS KUGLER
1 HOLSTEIN LN

BRATTLEBORO, VT 05302-0808

800/952-5200

The information block in the upper right corner reflects ownership information and the birth date of the animal. This block also designates whether the animal is male or female and the animal's barn ID or short name for AI bulls.

+1075M 95%R 4/2023 PTA +739NM +.13%F +.02%P +3.3PL +2.73T +.ODPR 2.5%DCE PTA 2.93SCS +2.54UDC 95%R 4/2023 PTA +.39FLC +0.4FI 2.3%SCE +203FE РΤΆ

Predicted Transmitting Ability (PTA) information follows the animal's identification and classification information. PTAs express the level of genetic superiority or inferiority an animal is expected to transmit to its offspring for a given production or type trait. These values are used to rank animals based on their genetic merit.

Line one indicates the Predicted Transmitting Ability for Milk (M), Fat (F), Protein (P), and Reliability (R) for production information. The date of the PTA for production calculation is also shown on this line. For animals that have a PTPI, the PTA values are estimated by averaging the parents' PTAs. This is denoted with #.

Line two indicates the PTA for Net Merit (NM) and the PTA% for Fat and Protein. For males this line will also include the percent of U.S. daughters in the evaluation.

Line three shows PTAs for Productive Life (PL), Somatic Cell Score (SCS), Daughter Pregnancy Rate (DPR), and Daughter Calving Ease (DCE).

Line four provides the animal's Predicted Transmitting Ability for Type (T), Udder Composite (UDC) and Feet and Legs Composite (FLC). The Reliability (R) for Type and the date of PTAT calculations are also shown on this line.

Line five shows PTAs for Feed Efficiency (FE), Fertility Index (FI), and Sire Calving Ease (SCE).

International genetic evaluations for type and production are labeled by printing MACE YIELD EVALUATION and/or MACE TYPE EVALUATION on the line above the PTA data. The TPI value will be followed by an M. If a conversion formula is used to convert a foreign type evaluation to a U.S. base then CONVERTED TYPE EVALUATION will be printed above the PTA data. These evaluations are based on either conversion formulas or Multiple Across Country Evaluations (MACE). Whenever the PTPI of an offspring of a bull with a MACE or converted proof is calculated a C or an M will appear after the PTPI value until U.S. information is available.

AGE X DAYS MILK DCRM % FAT % PRT DCRC 2-04 3 305 30820 94 4.7 1438 3.1 961 88X 365 36280 94 4.7 1706 3.2 1146 88 *** 5-05 3 131 9920 4.7 470 2.9 289

For females, **production records** follow the genetic information. Each main line indicates the TriStar Option; age at calving; number of times milked per day; length of record in days; pounds of milk; DCRM (Data Collection Rating for milk); fat percent; pounds of fat; protein percent; pounds of protein; and DCRC (Data Collection Rating for components) during that lactation up to 305 days. An "X" at the end of the line indicates that the record is significantly above herd average. A second line of data is only included if the cow's lactation is longer than 305 days (up to 365 days) for that lactation. Once a cow produces more than 100,000 pounds of milk, her total production information appears on the pedigree and is labeled "LIFE."

State and national leader records for Milk, Fat and Protein production are labeled on the line below the outstanding record. This recognition is based on TriStar Premier records and awarded in eight age categories.

Type of Testing Program Labels

TriStar Labels (for production records starting after 1/1/1997)		
Premier	***	
Deluxe	**	
Custom	*	
Automated Milk Records	AMR	

Type of Test (for records prior to 1/1/1997)	Dairy Herd Improvement Registry	Dairy Herd Improvement Association
Alternating AM/PM with a time monitor	APT	APM
Alternating AM/PM component sampling	APS	APC
Alternating AM/PM without a time monitor	APR	APD
Weights and component samples at monthly test milkings	DHR	DHI

7. The space below the production records is used to list other recognitions, including National Show placings, All-National and All-American recognitions, Elite Performer and Star of the Breed honors.



Holstein Association USA, Inc.

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