

# Holstein Assn. adopts new ranking formula

BRATTLEBORO, VT — The Board of Directors of the Holstein Association recently approved changes in methods of calculating two basic breeding tools to improve genetic ranking of cows and bulls: the Total Performance Index (TPI) and the Predicted Difference for Type (PDT).

The Board endorsed a recommendation of the Genetic Advancement Committee to implement a new TPI formula based on protein and fat yields, plus type, in a 2:2:1 ratio. New TPIs using

this formula will be reported on animals as a result of the sire summary run of July, 1986.

The new TPI rankings will realign genetic values to reflect the demands of domestic and international markets. In these markets, there has been a shift from fluid milk pricing to component yield pricing. This, along with an increase in the numbers of dairymen on protein testing programs, indicated the need for a change in the calculation of animal total performance indexes to help

Holstein dairymen compete in the marketplace.

The Total Performance Index, introduced by the Holstein Association in 1976, has found broad acceptance among dairymen as a primary screening tool for sire and cow selection. TPI provides a single industry standard for uniform comparison of animals across a wide range of management and economic conditions.

TPI values are calculated from production and type trait indexes

on registered animals and are listed in the performance files of the Association.

Holstein Association's Board of Directors approved the use of first record classification scores (closest to 30 months of age) in the BLUP-PDT evaluation procedures for the July 1986 sire summary run. Currently, PDTs are based on cows' most recent classification scores. BLUP is a statistical procedure which permits the ranking of bulls for transmitting ability of functional type, taking into account genetic trend and the genetic level of herd mates.

Research conducted by the Holstein Association, in cooperation with the University of Wisconsin, shows first lactation classification scores are a better standard of comparison.

Research results demonstrated a dramatic improvement in the ability of pedigree indexes, based on first records, to predict the actual PDTs of bulls. Researchers, however, recognized the importance of durability measurements based on information collected later in the cow's life. While first records do not measure an animal's longevity, and early estimate of conformation may be useful in

predicting the durability of a bull's daughter. Studies are being conducted to develop a measure of durability.

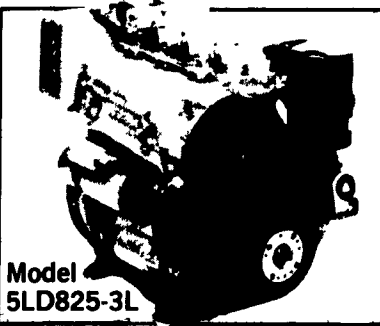
A high percentage of breeding and genetic decisions is currently made on first lactation information, i.e., whether a bull should go into A.I. service. Last records tend to compare relatively unselected younger cows with highly selected older cows. Consequently, the most recent classification records tend to favor older bulls, bias downward young bulls and inhibit the estimate of genetic trend for final score.

Action by the Holstein Association Board to improve PDTs and TPIs should help breeders achieve higher success with genetics in their herds. The use of first lactation classification scores in PDT calculations is expected to stabilize bull proofs, enhance herd mate comparisons and improve accuracy of proofs on young sires. Revision of the TPI formula, to include component yields, will more nearly reflect the national breeding goals of the industry. In the end, these improved breeding tools will give dairymen the means to achieve greater profitability of their animals.

## LOMBARDINI

The Powerhouse

## DIESELS For DAIRY, SHOPS And EQUIPMENT



Model 5LD825-3L

We have the right size, weight, shape, price and engine available.

**LOMBARDINI DIESEL USES 1/2 OR LESS FUEL THAN GAS ENGINES LESS DOWNTIME THAN GAS ENGINES**

4 to 80 H.P.



Model 9LD560-2

Is your old engine giving you a headache? Try a LOMBARDINI... World's Largest Manufacturer of Small Air-Cooled Diesel Engines.

**DIESELS OUR SPECIALTY**

**TAKE ADVANTAGE OF:**

1. 12 month warranty or 2,000 hours
2. Low fuel consumption
3. Low maintenance
4. Price per horsepower
5. Easy starting
6. 100% back-up with parts and service.

Let Us Know Your Service Problems Check Our Prices

Service After The Sale... That's Us!

## HOOVER DIESEL SERVICE

2998 W. Newport Rd.  
Ronks, PA 17572  
(717) 656-3322  
(717) 295-1729

Furnace Rd.  
Box 91A, R.D. 3  
Quarryville, PA 17566  
(717) 786-2173

DEALER INQUIRIES INVITED

THINKING OF BUILDING?

READ LANCASTER FARMING'S ADVERTISING TO FIND ALL YOUR NEEDS!



## Proven performers

Patz hook-and-eye links have proven their value over the years. The forged steel links provide strength and durability. The Patz link design provides chain flexibility that takes sprocket, corners and elevations smoothly for layout flexibility and minimum wear.

Choose the Model 400 (blue) link with more than 2 pounds of steel, or choose the thicker XH (red) link for longer pulls and heavier loads.

Progression forging builds extra strength into hook-and-eye link contact points. Final heat treating increased hardness, strength and wear resistance. Patz links withstand corrosion for long chain life.

For more information on replacing your gutter cleaner chain, expanding or a new installation, contact:

**Pat**  
automatic farm systems

608 Evergreen Road  
Lebanon, PA 17042  
(717) 274-5333



## Attention Hog Producers!

### Will hogs be profitable in 1986?

Now is the time to think about locking prices... and profits... for your 1986 hog marketing.

USDA's quarterly hogs and pigs report is due out December 23. Although current cash prices seem relatively good, this report could indicate breeding herd expansion is taking place on farms. This can lead to lower markets during summer and fall 1986.

Sound marketing strategy would be to take advantage of current Futures market to forward price at least a portion of 1986 marketing.

PACMA's forward cash contracting program has earned the respect and acclaim of hundreds of hog producers the past few years who use it as a price risk management tool. PACMA assumes all margin calls and takes the risk of adverse price movement in Futures delivery months. You are guaranteed a specified price for contract deliveries (usually at your regular market outlet) well in advance of actual marketings. All for modest trading fee.

Conventional hedges and options are also available through PFA's Commodity Futures Service.

Call your nearest PACMA marketing rep. to see how we can serve you better:

**Southeast PA**  
Dick Cole  
215-432-4111

**Central PA**  
Ron Manley  
717-761-2740

**Lebanon/Lancaster Cos.**  
John Kimbark  
717-664-2322

**Western PA**  
Dwight Allhouse  
412-353-9160  
State Office  
Ken Hopkins or  
Mike Orndorf  
717-761-2740