

EXTENSION CORNER

PA DHIA Assists With Early Evaluation of Progeny Test Sires

by Larry W. Specht

The early evaluation of young sires under progeny test is most desirable. It allows the owner of such sires, either an AI unit or a breeder/syndicate group, to start banking semen on bulls that appear likely to be worthy of extensive use. It also permits the early removal of bulls that will be average or below in genetic merit. This saves on feed, labor and housing costs. Official sire evaluations are produced twice a year by the USDA Animal Improvement Programs Lab (AIPL) and sires cannot be promoted or merchandised until they have at least one USDA-AIPL summary. However, decisions can be made about the best and the poorest sire prospects from early first lactation data on their daughters.

A program is available from PA DHIA that locates all correctly identified daughters of a sire that are on a production testing program. Development and testing of the procedure was a joint effort by the PA DHIA staff and Penn State's Dairy and Animal Science Department. Breeding organizations provide a list of sires from their progeny testing program and the PA DHIA processing center runs the program. Five breeding studs and two breeder/syndicate groups currently pay the costs of summarizing the information.

The procedure involves taking the lactation-to-date production on each first calf heifer of a sire and comparing it to the production of first lactation daughters of other sires in the same herd.

The lactation-to-date figures are estimated to a 305 day basis and mature equivalent (ME) factors are applied before the daughter-herdmate comparison is made. While USDA-AIPL "official" sire summaries are calculated using a far more sophisticated procedure, the results from the PA DHIA method rank the sires in virtually the same order.

If your herd is participating in a progeny test program with one or more studs it is important that you as a cooperator provide the DHIA technician with the calving difficulty score for each and every calf born on your farm.

Good identification is needed in the field in order to locate the largest possible number of daughters of a sire. Missing or incorrect registration numbers, eartag numbers, breed codes, and/or birth dates on an animal, her sire or her dam will make it impossible to include her in her sire's summary. Loss of daughter information may be as high as 15 to 20 percent on an individual sire. Improving identification increases the efficiency of the progeny test program. Additional numbers add reliability to the production estimate. It may also permit the owners of the sire(s) to distribute less semen per bull tested.

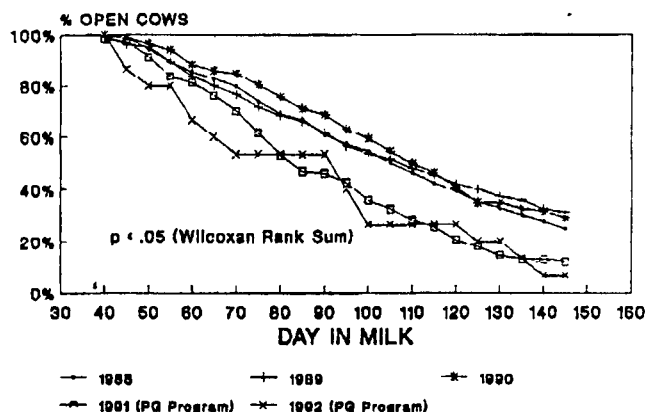
Progeny testing of young sires by AI units is largely responsible for the accelerated rate of genetic gain that has occurred in the U.S. dairy population in the past two decades. The production record information made

available through the DHIA program is an integral part of the process that allows the breeding industry to select the best potential parents of the next generation of the U.S. dairy herd.

CONSULTANT

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Pregnancy Rate Analysis



Pregnancy Rate Analysis

Through the use of Pennsylvania DHIA records new approaches to measuring reproductive efficiency are being developed by Dr. J. Ferguson and Dr. D. Galligan at the Center for Animal Health and Productivity, New Bolton Center, University of Pennsylvania School of Veterinary Medicine. These new techniques allow producers and veterinarians to investigate herd fertility problems and to evaluate reproductive management programs. Through the ARIS system, reproductive data can be downloaded from herds subscribing to DHIA and run through various computer evaluation programs developed

at the Center for Animal Health and Productivity. The figure shows an evaluation of the pregnancy rate on a herd subscribing to a prostaglandin synchronized breeding program. At calving, 100% of cows are open and overtime they become pregnant. The rate at which they become pregnant (pregnancy rate) is related to the heat detection rate and the conception rate of the herd. The graph shows that the prostaglandin program has dramatically increased the pregnancy rate as indicated by the faster decline compared to previous years. By using DHIA data in conjunction with new approaches to information management better decisions can be made.

Calving Ease Reporting

by Larry W. Specht

Reporting of calving ease information on A.I. sires has been underway for several years. The first scores were collected by individual studs and forwarded to the Mid-States Processing Center at Ames, Iowa. Publication of the results is coordinated with the National Association of Animal Breeders (NAAB).

The first records on calving ease were reported by individual herd owners on forms supplied by the AI unit. Recently, collection of the data has moved to the DHIA program. Most DHIA record processing centers make it possible for the DHIA technician to report birth difficulty scores on the monthly barn sheet. The system of scoring is as follows:

Score	Calving Difficulty
1	No problem
2	Slight problem
3	Needed assistance
4	Considerable help needed
5	Extreme difficulty

The score reflects, in the herdowner's judgement, how difficult it was for the animal to deliver the calf.

PA DHIA started collecting calving ease data in early 1992. The processing center assembles the information and reports it to the studs twice a year. The AI units pay for this service and forward the data to the Mid-States Processing Lab for summarization.

The major reason for collecting and distributing the information

is to avoid the use of bulls with high EDBH scores on heifers that will calve for the first time. Very little problem is encountered with cows initiating their second or later lactations. EDBH stands for Expected percent of Difficult Births in Heifers. The average EDBH value for a sire is 9 percent with a range from 3 to 23 percent. Most bulls have values between 6 and 12 percent and very few sires have extremely high values. But the high EDBH values are the important ones to know about!

Reporting of the data "on-the-farm" is extremely important for young sires in a studs progeny test program. It is desirable that we get as many births reported as possible on the progeny test bulls but it is equally necessary that births from all other sires used in the herd are reported because the latter are used for within-herd comparisons. This approach neutralizes the effects of some herds feeding better, having larger heifers at calving time and/or doing a better all-around management job at the time of calving.

Reliability (REL) and the number of calvings are reported for EDBH to indicated the accuracy of the information. The greater the number of observations the more accurate EDBH values are in predicting calving difficulty.

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NEW MEMBERS ON TEST SINCE DECEMBER 1992

Adams - Horizon Farm
Beaver - Hudack Farm Standard Way
Bedford - James + Marcy Ladson Horizon Farm
William Barkman L & L Holsteins Green Valley Farm
Richard Janna Hearn Robert G Replogle
Berke - Glenn A Davis Ridge Runner Jerseys
Daniel M Hoover Jacob H Leiby Bruce S Zuber
Blair - Vernon A Martin
Bradford - Merton Harkness Jay & Kelly Andrus
George Mallory Marlene Wilber Michael Davis
Roger Alexander Ada Huffmaster Np N Tuck
Everitt Vanderhoof Walt Shaffer
Bucks - Grant + Wolfe
Butler - Larry A Schnur Steve Lundgren
Cambria - Krug Farms
Centre - Samuel K Esh Helen Feltenberger John Z Stoltzfus Dan B King Jr Henry M Glick Jr
David C Esh Myra L Buck Daren Brown Willow Bank Farm Clear Mt View Hstn Amos E Stoltzfus Elam Stoltzfus
Chester - Robert + Betty Peifer Chnst G King
Bryann Huf + Pat Jenkins T + T Grossman
Clearfield - Dennis + Janet Shaw
Columbia - Corey C Wolff Pen Col 2
Crawford - Breezy Dale Swiss Dorothy S Irwin
Pat Liszka Lester R Mast Ann See Martha Stoltzfus Louise Hawk Tim Hutchison Gail Allen
O Darian Farm
Cumberland - Maple Haven Dairy Hensel Hill 2
Fassner Farms
Erie - Brian Cooper Ward Farms
Fayette - Hoke Farm
Franklin - Rick Harshman Willow Bank Jerseys
Dale Carbaugh Steven E Ruby
Huntingdon - Keith Coddington Johnny Middagh Jr Scott Feathers
Indiana - Daniel Beiler
Jefferson - Mike Shaffer Wayne + Rita Shaffer Jack E Kuntz
Juniata - Melvin Hart + Sons Carl Burd Steve Long Gerald Spigelmyer
Lackawanna - Elwood White Daniel Chlewski
Garden Spot Red Rose Amos K King Henry F Bawell Samuel E King Enos E Zook
Lebanon - John W + Anne Burkholder Jay W Good
Luzerne - Kenneth Ryman
McKean - Dale + Bambi Daub
Mercer - Don Kathy Cornelius Xanadu Jerseys
Mifflin - Melvin + Judy Peachey Amos M Yoder
Paul E Fink Steven D Kerstetter R + A Holsteins
John + Paul Ruhl Bill + Sue Sellers
Montour - William J Hagerman
Northampton - Carol Klobner Elly Hushour
Perry - Lamar H Wise Aaron M Nolt Edwin W Nolt
Potter - Daryl Lisa Schafer Timothy L Andrews
Snyder - Mark Stover I Weaver Brownstone Farm John W Boonie Jsy Michale S Shehan
Somerset - Craig R Mlake Raymond + Edna Yoder Rural Reflection Fm Nu Venture J M Farms
Susquehanna - Earl Frances Forwood J E S View Farms Denis & Jane Halstead Dale + Jeanne Jordan
Tioga - Jay H Graham Gerald Hurd Jr D + J Jerseys John Bonnie Kendrick Rocky Trail Farms
Union - Chester L Bender Amos O Zimmerman
Shoemaker Bros Kaiser Run Jerseys Curvin S Hoover Leroy Troester Jr
Venango - Schwabs Dairy Jerry + Kathy Beary
Washington - C T Thompson Dairy James W Miller Salvini Dairy D & D Holstein
Wayne - Paul Kolinger EJS Ayr Willow Farm
Peter & Ileana Seman Gerald Bruggell Jr J K Farms Adam Kennedy John & Liz Madsen John Wetmore
Westmorland - Ralph + Kelley Sager
Wyoming - O'Brien Robert J Robert J O'Brien
York - Honeycrest Farms Dennis Conrad Hollow Hills Alpines

Cont'd from page 3
is held on a monthly bases. He has been a member of the State Board since 1980, John graduated from Otto Schering College, Cary, Illinois.

Pisgahview Farm aims to produce quality milk based on a family oriented farm. The DHIA program has been very helpful in the decision making. Records are reviewed frequently to keep abreast for changes that need to be made on a regular basis.

HEARING RESULTS

On April 20, 1993 a hearing was held in State College, PA on charges of violations of Official rule #17 against Calvin D. Watson, owner of Little Pond Farm, RD 2, Box 406, Troy, PA.

Mr. Watson was found guilty of fraudulent activity in violation of the National Cooperative Dairy Herd Improvement Program Rules by increasing the milk weights recorded by the DHIA technician on the PA DHIA barn sheets on October 6, 1992 on two separate cows. He was also found guilty of inflating his rolling herd average via the fraudulent practice of lengthening the intervals between the milkings on July 24 and July 25, 1992.

Sanctions were imposed on Mr. Watson as follows:

1. The lactations of the two cows involved in the October 8, 1992 charge were declared unofficial.

2. The rolling herd average for the entire herd was declared unofficial as of January 21, 1992. A new official average will not commence until the terms of probation, listed below, are met and the lactations of the cows involved have ended.

3. Official privileges will be available under probationary conditions which shall last three years. Mr. Watson will be subject to random verification testing at his expense for the probationary period.

4. In the event of other rule violations during probation, all records of all cows in the herd shall be declared unofficial retroactive to January 21, 1992. In addition, there will be a three year suspension of all official privileges beginning on the date of the rule infraction. At the end of the suspension, Mr. Watson may apply for reinstatement of official privileges on conditions to be set by the Board of Directors.

Mr. Watson's right of appeal under the association's Bylaws expired on May 13, 1993

George T. Cudoc Jr
State Director
Northwestern District

George resides in Valencia, Butler County with his wife, Aileen and three children, John 15, Marie 13, Adam 11. George is a graduate of Penn State University with a BS in Animal Science. He is the Farm Manager for Marburger Farm Dairy Inc. with 270 Register and grade Holsteins, farming 380 acres and renting an additional 300 acres. Also owner of Crown-Jewel Holsteins consisting of 30 cows and 30 heifers. DHIA testing since 1978 upon arrival at the Marburger's.

George has served six years on the county board as president. George was re-elected to the State Board on February 11 at the District meeting. He has served on the Finance Committee 2 years, and Planning Committee 1 year. He currently is the chairman for the DRPC Committee.

George feels that in the future, DHIA probably will turn its attention to more analytical type programs than just data collection.