

#### From the Department of Dairy and Animal Science

This regular column from Penn State's Department of Dairy and Animal Science features the research findings, student opportunities, and resports on other important topics generated in the Department. The back issues of the column are archived on Lancaster Farming's Internet www.lancasterfarming.com home page. Look for them.

# **Globalization Of Dairy Cattle Breeding Programs**

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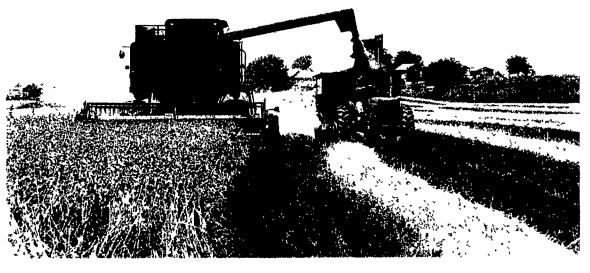
Does it sometimes seem like the world is getting smaller? Of course the size of the world is not changing, but our relationships with people and businesses from outside the US have increased dramatically over the past few An evolving global business climate, ımproved communications and new technologies have facilitated the rapid change in the way business is done in every sector of our economy. Dairy cattle breeding genetic companies and ımprovement programs have likewise changed in response to these factors. One significant change is the merger of smaller breeding companies and the formation of larger organizations that service many countries At this time in our history, almost all US breeding companies and cooperatives have formed some type of alliance or partnership with companies located in other major dairy producing countries.

One catalyst for the changes that we have seen in breeding programs is the exchange of semen and embryos across countries. This exchange now occurs with relative ease and at a moderate cost. Exporting and importing of cattle, semen, and embryos is not new, but the magnitude of the exchange in genetic material exploded in the mid 1980s and continues today Efficient exchange of genetic material requires that genetic

evaluations be available across countries. This need led to the development of INTERBULL and the routine publication of international genetic evaluations.

Although the globalization of cattle improvement programs may not be viewed by everyone as desirable, several positive things have resulted from the changes that we have seen. The first positive change that has occurred is the increased export of semen and embryos by US producers and US based breeding companies. This has brought new revenue into our dairy economy and helped other countries improve their cattle at an accelerated pace. The second positive change is the access by US producers to bulls progeny tested in countries outside of the US. Although the impact of bulls tested outside the US has been relatively limited until recently, semen exchange will eventually lead to increased genetic improvement of dairy cattle within the US. Among the negative aspects of globalization is the increase in inbreeding in our dairy cattle populations due to the increased focus on a small number of families that provide the bulk of the genes to future generations of Breeding dairy cattle. organizations are now more actively addressing the issue of inbreeding by trying to limit the number of young bulls sampled from the most popular families and sires.

Rapid structural changes have occurred in US based breeding companies and cooperatives over



### The Blessings Of Harvest Time

The blessings of a good growing season are evident across the local countryside. The beautiful greens and browns of growing corn and ready-to-harvest grain are enough to make any true farmer feel grateful. The Pennsylvania Ag Statistics Service reports mostly adequate to a surplus of moisture. Warmer temperature and showers have helped to advance most field crops. A high percentage of hay cut was rated good to excellent. Pasture conditions were conducive to normal or greater than normal grazing. Fruits and vegetables were promising a much better crop than last year.

In the photo, like for many other farmers, grain harvest is under way in earnest. On Tuesday afternoon, this photographer found Ken Neff on the combine and Keith Landis providing grain transportation. To empty the grain bin while on the go takes a little driver coordination, but it certainly keeps harvest moving. This barley harvest operation scene was captured near Rohrer's Mill between Strasburg and Gap in Lancaster County. Photo by Everett Newswanger, editor

the past decade. Consolidation in herd size and climate) and not on breeding cooperatives has occurred since the 1960's, but large ventures with companies based outside of the US have been a recent development. This partnering with companies from other countries has blurred national boundaries and intermingled progeny testing programs ·We now have progeny testing programs where original daughters of progeny test bulls are strategically located in more than one country. International evaluations provided INTERBULL are now essential to our breeding programs. Current international evaluations are calculated and published for each cooperating country, discussions have begun on redefining international genetic evaluations to focus on management differences (such as

differences due to country and political borders. >From a scientific perspective, the idea of genetic evaluations focused on specific management factors is much more appealing than genetic evaluations focused on country differences. However, no matter what changes do occur, the US will be one of the most important sources of data on daughters of progeny tested bulls in the foreseeable future. Currently, more bulls are progeny tested in the US than any other country, and this will likely continue despite more integration of progeny testing programs across countries in the near future. In addition, US dairy herds will continue to be a major supplier of young bulls for progeny testing in the near future. This is due, in part, to the fact that many other countries do not have the dairy

population size that is available in the US. The US has over 9 million dairy cows compared with most other western countries that have a few million dairy cows or less. For examples, France has about 4.5 million cows, the Netherlands has about 1.6 million cows, and Canada has about 1.2 million cows.

Changes in the dairy cattle improvement industry continue to take place. Changes may be more rapid than in past decades, but our industry will continue to adapt and adjust. The nature of the dairy cattle breeding industry requires that we think globally and understand what is happening on a wider scale than in the past. I encourage you to keep up with changes in the dairy industry and look at these changes as new opportunities, not as roadblocks or hurdles overcome.

### **Glickman Names Members To Honey Nominations Committee, National Potato Promotion Board**

WASHINGTON, D.C. — U.S. Agriculture Secretary Dan Glickman recently named 17 members to the National Honey Nominations Committee, which nominates individuals for anpointment to the Honey Board, and Glickman appointed 38 members to the National Potato Promotion Board.

Newly appointed members to the Honey Committee are Wayne G. Vandre, Anchorage, Alaska; John S. Tulloch, Odessa, Del.; James E. Kellie, Larned, Kan.; Stanley F. Hummer, Bossier City, La.; Don E. Moore, St. James, Mo.; Les Wienke, Wolf Point, Mont.; Glenn Staggs, Oklahoma City, Okla.; George K. Hansen, Colton, Ore.; William F. Childers, York, S.C.; and Lawrence O. Kelley, Reston, Va.

Reappointed members are Troy H. Fore Jr., Jesup, Ga.; Gus Rouse, Captain Cook, Hawaii; Oren D. Best; Sunfield, Mich.; Allen Tuttle, Vandalia, Ohio; Bret L. Adee, Toronto, S.D.; William D. Lane, Memphis, Tenn.; and Lee Heine, Hustisford, Wis.

All members will serve terms beginning immediately and ending December 31, 2002.

The Honey Board administ an industry-funded, national research, promotion and consumer information program to increase U.S. honey consumption and exports.

Newly appointed producer members National Potato Promotion Board are Zane W. Smith, Hastings, Fla; Ronald W. Buatte, Glenns Ferry, Idaho; Boyd S. Foster, Rigby, Idaho; James P. Hoff, Idaho Falls, Idaho; Rodney D. Lake, Burley, Idaho; Daniel D. Moss, Dedo, Idaho; Paula G. Parks, Blackfoot, Idaho; Richard F. Poteet, Rupert, Idaho; Bart D. Wattenbarger, Shelley, Idaho; Jay G. Savage, Deerfield, Mass; Duane A. Denniston, Plainwell, Mich.; Jon G. Haindl, Cooks, Mich.; William N. Brooks Jr., Elmer, N.J.; Ray S. Meiggs Jr., Camden, N.C.; Donald J. Smith, West Chester, Ohio; Dennis L.

Slagell, Weatherford, Okla.: DeeAnn G. Amstad, Hermiston, Ore.; Michael K. Pixton, Warden, Wash.; and John W. Mommsen, Rice Lake, Wis.

primary herd feeding strategy,

The newly appointed porter members to the Potato Board are Richard D. Beck, Twin Falls, Idaho and Roberto Meza Sr., Pembroke Pines, Fla.

Reappointed producer members are Robert L. Layton, Gilbert, Ariz.; Douglas G. Gunnels, Center, Colo; Frank C. Johns Jr., Hastings, Fla.; Stanley Lynn Loosli, Ashton, Idaho; Edward A. Smith, Pocatello, Idaho; Carl B. Taylor, Idaho Falls, Idaho; Larry E. Reynen, Hollandale, Minn.; Gregory R. Stocker, East Grand Forks, Minn.; James P. McCormick, Bliss, N.Y.; David J. Hankey, Park River, N.D.; Timothy I. Moomaw, Wooster, Ohio; H. Bruce Richardson, Jr., Capeville, Va.; Brett E. Bergeson, Moses Lake, Wash.; Nelson Y. Cox, Warden, Wash.; and Kevin J. O'Rorke, Richland,

Wash. The reappointed importer

## **Poster Contest Winners**

HAMBERSBURG (Franklin Co.) — Franklin County school students were recently recognized by the Franklin County Conservation District for their winning posters in the district's annual poster contest.

This year's theme was "On The Verge Of A New Millennium: Today's Lessons — Shaping Tomorrow's World."

The poster contest is sponsored yearly by the Franklin **County Conservation District to** county school students. The first three places in each division receive certificates and monetary awards.

Winners, listed in divisions,

are as follows:

Division Grades 10-12: No entries were received in this divi-

Division Grades 7-9: First

members are Randy A. Bauscher, Rupert, Idaho and Sanjiv K. Kakkar, Princeton Junctions, N.J.

Appointees will serve terms beginning immediately and ending on February 28, 2003.

Place: Hannah Ehrhart, Faust Junior High School; Second Place: Ian Gefausio, Faust Junior High School; Third Place: Misty Bowermaster, Franklin County Learning Center.

Division Grades 4-6: First Place: Maegan Myers, Fannett-Metal Elementary School; Second Place: Lance Umbrell, Fannett-Metal Elementary School. Third Place: Cassidy McGee, Fannett-Metal Elementary School.

Division Grades 2-3: No entries were received in this divi-

Division Grades K-1: No entries were received in this divi-

First place winning posters in each division will be submitted to the state competition sponsored by the Pennsylvania Association of Conservation Districts. Awards in the state competition will be presented at King of Prussia at the Pennsylvania Association of Conservation Districts Annual Conference.