Department of Dairy Science
www.dasc.vt.edu
Virginia Tech, Blacksburg
Vol. 24, No. 8 August 2003
540/231-4758 FAX: 540/231-5014

DAIRY PIPELINE

I wish you all the best. Effective September 1, I will leave the Dairy Science Department and become Associate Director of Virginia Cooperative Extension in charge of Agriculture and Natural Resources programs. This move comes after much difficult thought and discussion. I hope I can be part of the solution in assisting Extension in getting turned around after many retirements over the last year. Also I will work with all Agriculture and Natural Resources programs including dairy. It will be a challenge and I'm sure I will need all the help I can get. I will continue as Director of the Forage Testing Lab, at least for a while. Ray Nebel will become the Dairy Science Extension Coordinator and Project Leader. He will coordinate dairy programming of specialists from the department as well as our four Area Dairy Agents. Our agents are Sue Puffenbarger in Franklin County, Andy Overbay in Wythe County, Alan Grove in Rockingham County, and Tina Horn in Augusta County. Lonnie Johnson, who served Central Virginia, became District Director of Extension for Southeast District. Jerry Swisher retired last year, as did Jerry Jones in the department. I look forward to seeing dairy folks in the future and will be looking for an opportunity to talk about dairy nutrition, I'm sure.

-- Charles C. Stallings
Extension Dairy Scientist, Nutrition
(540) 231-4758 email: cstallin@vt.edu

Net Merit Index changes with August 2003 proofs. Net Merit indexes for AI bulls in the August 2003 sire summary include three new traits and are based on different weights than the previous version of Net Merit. The three new traits are daughter pregnancy rate (DPR), service sire calving ease (SCE), and daughter calving ease (DCE). DPR receives a relative weight of 7% in Net Merit, while SCE and DCE each receive –2% of total emphasis. This emphasis has to come from other traits already in the index, meaning that something else loses ground. The traits with less emphasis were production traits and productive life (PL), where total weight for milk, fat, and protein declined from 62% to 55% impact on Net Merit. Yield will still improve, but a little less rapidly than with the old index. The decline in emphasis for PL was from 14 to 11%, but genetic progress in PL should actually increase because selection for more fertile daughters (from positive weight on DPR) and for less calving difficulty (from negative weight on SCE and DCE) will increase longevity. Over a ten year period, selection on Net Merit would decrease SCS by -.44, changing the breed average SCS for Holsteins from 3.10 to 2.66. That's an impressive change, but it would be gradual enough that many dairy producers might notice fewer cases of mastitis and less culling or death loss from severe mastitis. Ten year's selection for better fertility through Net Merit would improve DPR by about 1% (from about 20% pregnancy rate to 21% for an average Holstein cow). DPR will change more slowly than some other traits because of low heritability, but perhaps more importantly because of a genetic antagonism with milk production. Genes for higher milk tend to be associated with genes for lower fertility. However, fertility will improve over time with the new index whereas selection on any of those indexes that emphasize production and ignore fertility can't make that claim. The changes in Net Merit make it even more clearly the "index of choice" for commercial milk producers in the United States.

-- Bennet Cassell
Extension, Dairy Scientist
Genetics and Management
(540) 231-4762 email: bcassell@vt.edu

**** Upcoming Activities****

Farm and Family Showcase	Sept. 4-6
Kentland Farm, Virginia Tech	
National 4H Dairy Conference	Sept. 28 – Oct. 1
Madison, WI	
Dairy Science Recruiting Day,	Oct. 12
Virginia Tech	

Charles C. Stallings
Dairy Extension Coordinator
and Extension Dairy Scientist, Nutrition