

National Animal Identification System Premise registration coming soon to Virginia.

The stated goal of the national program coordinated by the United States Department of Agriculture is to “identify all animals and premises that have had contact with a foreign animal disease or a domestic disease of concern within 48 hours after discovery”. It is a voluntary program that will be conducted by the Virginia Department of Agriculture and Consumer Services (VDACS) with support from Virginia Cooperative Extension. The first phase in 2005 involves premise registration. If you have a location (premise) that has domestic animals that leave the farm at some point in their life, this program is for you and you are encouraged to participate. In March Agriculture and Natural Resources Extension Agents will undergo training on how this system will work. After this time premise registration can begin. Premises can be registered by filling out a paper form and submitting it to VDACS or by direct web access. After registration a seven character premise ID number will be issued. Extension agents can assist with the process and will be conducting meetings to discuss the program. At some point animals will be identified and connected to the premise. This part of the program is under development and will not occur until later in 2005 or beyond. At some point it is possible for the program to become mandatory but even if it does not there will likely be enhanced value for animals that have traceability. Virginia dairy farmers have been identifying their animals and production testing for many years. This system will continue that emphasis and contribute to a safe food supply for all.

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Too much “dairy character” The trait called “dairy character” or “dairy form” is losing its luster in genetic selection indexes. Research has shown that cows that lose a lot of weight after calving to support high milk production tend to have greater health and fertility problems. Such cows cannot meet their energy requirements from the feed they eat, and they mobilize stored body energy, fat mostly, to meet the deficit. For many years, one of the “holy grails” of dairy cattle breeding was the high producing, very clean, non-fleshy dairy cow. Looking back on that era, I recall the doubt that many (me included) had in high milk records on cows with substantial amounts of body tissue - muscle and fat reserves - across the withers, down the topline, and in the seat of the pants. “Fat” cows got that way because they used feed for body fat instead of milk. Certainly, there were cows like that in the dairy population 30 and 40 years ago, but it’s a different story today. The genes for production are in our dairy cows, but we haven’t tried to control whether the energy to make that milk came from feed consumed or body fat. Recent changes to the TPI formula put negative weight on dairy form, favoring a slightly less “dairy” cow. Really good work has been done in Scotland in recent years on energy balance in selection (for fat plus protein) and control line Holsteins on high and low concentrate diets. That project had several objectives, but the conclusions of a recent paper (J. Dairy Sci 87:4318) included this statement: “Selection primarily for yield perhaps exacerbated by additional selection for angularity (or dairy form) has led to cows that mobilize more of their body energy in early lactation and do not replenish all lost body lipid

later in their productive life.” Some measure of changes in body energy during peak production periods could well be part of future selection indexes. The search for the cow with the ability to maintain body condition under the energy demands of high production through feed consumed will be a tough nut to crack. We will not likely have feed intakes and changes in body weights on large numbers of daughters in progeny test programs. Indicator traits will be necessary. Dairy form is one such trait. The negative weight it receives in the new TPI reflects the findings of the Scottish study.

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PI Test - What Is It? The preliminary incubation or P.I. test was developed in the 1930's as an indicator of unsanitary conditions on dairy farms. The P.I. test indicates the presence of psychrotrophic bacteria, which are primarily made up of gram negative bacteria (pseudomonas, some coliforms, flavobacterium, and some alcaligenes), and are capable of growing at temperatures below 15 degrees C. (59degrees F.). The P.I. test is conducted by incubating the sample of raw milk at 13 degrees C. (55 degrees F.) for 18 hours and then a Standard Plate Count (SPC) is run. The preincubation allows psychrotrophic bacteria to grow until numbers are high enough to be detected by the SPC. A good (low) P.I. count is less than 10,000 cfu/ml; an acceptable level is less than 50,000 cfu/ml; and a count over 50,000 cfu/ml should be a concern. To prevent a high P.I. count dairymen should maintain a good sanitation program for cows and milking equipment. This includes removal of udder hair and use of a sanitizing teat dip to prep cows for milking. All equipment should be properly washed after each milking, and sanitized prior to use including the bulk tank. Inflation and milk hoses should be replaced at regular intervals, and the milk cooled to less than 40 degrees F. within

two hours of milking. A final place to check for high counts is your farm's water supply. By implementing a rigid sanitation program on your farm you can improve your milk quality.

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**** Upcoming Activities****

Ninth National Dairy Calf and Heifer Conference, *Sioux Falls, SD* March 30-Apr 1

Little All-American Show & Banquet

April 16

VT Showcase Sale, *Virginia Tech*

April 15

Hokie Cow Classic, *Virginia Tech* May 31

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