Virginia Cooperative Extension
Virginia Tech • Virginia State University

Virginia Tech College of Agriculture and Life Sciences
Virginia State University College of Agriculture

DAIRY PIPELINE

Volume 36, No. 1 January/February 2015

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Culling Patterns Can Tell a Story

"Paying attention to the reasons for and timing of culling can improve overall herd management."

Culling is a regular part of dairy herd management; cows leave the herd for a variety of reasons on a routine basis. In fact, culling may be so commonplace that one forgets to take time to discover what culling patterns can reveal about management. The biggest reasons for culling and the timing of culling relative to days in milk can offer hints about issues in the herd that could include transition cow management, mastitis, and reproduction.

The ability to conduct a reasonable analysis of culling begins with good record keeping. Accurate reporting of when and specifically why an animal left the herd is key. DHIA herds can report culling information at each test day. Those enrolled in PCDART can make entries at any time; these herds can also submit a primary and secondary reason for culling. Typical reasons for culling reported on DHIA are dairy (sold to another producer), low production, reproduction, mastitis, udder, feet and legs, injury, disease, and death.

Recommended culling goals

Overall culling rate:	<30%
Involuntary culling rate:	<15%
Cows culled for reproduction:	<6%
Cows culled for mastitis:	<3%
Cow mortality:	<2%
Percent left by 30 days:	<4%
Percent left by 60 days:	<6%

Culling can be divided into two categories: voluntary and involuntary. Voluntary culling is desirable culling. It is an opportunity to generate additional income through dairy sales and/or to improve the quality of the herd by eliminating the lowest producers. Cows sold for dairy purposes are expected to generate more income that those sold for beef.

Involuntary culling is undesirable; it is culling resulting from some sort of problem with the cow including that she will not breed, has mastitis, or gets injured. Death is obviously the least desirable cull since there is no salvage value. In order to sell more animals for voluntary reasons, one must keep involuntary culling rates low. One cannot simply solve all herd problems strictly through culling without addressing the underlying cause. For example, if a herd has a mastitis problem, culling will not solve the issue if the underlying cause for mastitis has not been addressed—like poor milking procedures or an unclean environment.

The optimal level of culling may differ from herd to herd. Milk, feed, and cull cow prices influence this optimal level as well as the herd's plans for herd size maintenance or growth. It is recommended that herds with plans of maintaining herd size have an overall culling rate of 30% or less. Herds in expansion mode that are attempting to increase herd size from within would be expected to have a lower culling rate.

The best time for a cow to be culled from the herd is later in lactation. Culling in early lactation is costly because one fails to realize the cow's peak milk potential. It is recommended that less that 4% of cows be culled in the first 30 days of lactation and less that 6% in the first 60 days.

Dairy Records Management Systems developed an excellent tool to help producers analyze culling patterns in the herd. The DHI-232 Survival Analysis report may be selected by producers who want to know more about their culling than just the number of animals that left the herd in the past 12 months. This report contains an initial breakdown of culling by lactation, month of calving, and days in milk. It also offers a survival curve by lactation that graphically depicts when during the lactation cows are leaving the herd. The last page of the report contains a summary of the reasons cows left herd by days since fresh and lactation. If too many *(continued on page 2...)*

DAIRY SCIENCE

Upcoming Activities

See VTDairy for details.

Feb. 3, 2015
VANTAGE-no-til conference
http://virginianotill.com/

Febr.4-5, 2015
PA dairy summit, Lancaster, PA
http://www.padairysummit.org

Feb.4-5, 2015
Canadian Dairy Xpo, Ontario Canada,
http://www.dairyxpo.ca/

Feb. 18-20, 2015
69th Annual Virginia State Feed Association & Virginia Tech Nutritional Management "Cow College"
Hotel Roanoke
Roanoke, VA

Mar. 9-13, 2015
Area Dairy Conferences
--March 9 - Amelia
--March 10 - Harrisonburg
--March 11 - Culpeper
--March 12 - Rocky Mount
--March 13 - Marion

If you are a person with a disability and require any auxiliary aids, services or other accommodations for any Extension event, please discuss your accommodation needs with the Extension staff at your local Extension office at least 1 week prior to the event.

For more information on Dairy Extension or to learn about current programs, visit us at VTDairy —Home of the Dairy Extension Program at: www.vtdairy.dasc.vt.edu.

R.E. James,
Dairy Extension Coordinator & Extension Dairy Scientist, Dairy Nutrition

cows are leaving in early lactation, this report can call attention to the primary reasons.

The overall goal of culling is to improve profitability of the herd. Paying attention to the reasons for and timing of culling can improve overall herd management.

—Dave Winston
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Nuisance Bird Control

The European Starling is a non-native bird in the United States. Since it is non-native, lethal control measures are available to producers. Starlings are abundant year round, but are often only a problem in the winter. During a year like our last one, when the weather is particularly cold and the ground is snow covered these birds are looking for convenient food sources.

Unfortunately, cattle feeding areas provide these sources. Starlings can eat 50% of their body-weight in feed a day. One thousand birds can easily consume 100 pounds of grain in a day. Many producers have tried using shotguns, pyrotechnics, or just closing the barns up, but these methods have not proven to be very effective for these elusive birds. Hawks are natural predators to Starlings—but attracting them to reside near the dairy can be problematic.

> "During a year like our last one, when the weather is particularly cold and the ground is snow covered these birds are looking for convenient food sources."

The USDA offers baiting services for farmers, this can be effective, but has a significant cost. In Virginia, a pesticide called Starlicide ® tis available for farmers to purchase with a private pesticide license. This chemical comes premixed and ready to use. Check with your local coop or chemical suppliers for prices and availability in your area.

Before you use this chemical make sure that no protected birds will have access to the bait as it will kill most types of birds or fowl. The chemical does not have a significant effect on cattle or other animals around the farm.

> "If this winter proves to be extremely cold it is likely that these starlings will be a problem for many dairy farms again this year."

To effectively use Starlicide ® you first need to pre-bait the birds for about a week with something palatable like dog food or energy pellets. The best time to put the bait out is in the morning when the ground is frozen or snow covered. It is a good idea to notify any close neighbors of your plans so it won't come as a surprise if they find dead birds on their property. If this winter proves to be extremely cold it is likely that these starlings will be a problem for many dairy farms again this year.

—Jeremy Daubert
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2015 Extension is a joint program of Virginia Tech, Virginia State University, the U.S. Department of Agriculture, and state and local governments. DASC-45NP