

DAIRY PIPELINE

Volume 40, No. 5 June 2019



ARE COWS TELLING YOU SOMETHING ABOUT YOUR COMPOST-BEDDED PACK BARN MANAGEMENT?

—Gonzalo Ferreira, Extension Dairy Scientist, Management; gofn@vt.edu

“If cows avoid walking and laying down on the bedding, then it is fair to assume there may be something wrong with the bedding.”

Compost-bedded pack barns have become a popular system for housing dairy cattle. These barns consist of an open area without stalls that allows free movement of the cows around the barn, therefore providing cow comfort. To ensure cow comfort, different bedding materials can be used in compost-bedded pack barns. The most common bedding materials are wood shavings or sawdust, although wheat or rye straw can also be used. For the latter, however, bedding management can become more challenging.

Given that manure from the cows is mixed with the bedding material, the compost-bedded pack barn system is considered a “living system” with a heavy load of environmental pathogens that may increase the incidence of mastitis. To minimize the incidence of mastitis, it is critical to ensure the bedding material is as dry as possible. This is accomplished through aeration of the bedding material, which can be done using a rototiller, a vertical plow or chisel, or any other tool combining these actions. Through the frequent and proper aeration, heat production from microbial activity will be maximized and water will evaporate more easily. This will result in much cleaner cows.

Even though one of the goals of the system is to ensure cow comfort, it has been quite common for me to observe unusual behavior when visiting farms with compost-bedded pack barns. This unusual behavior typically includes standing cows in the feeding alleys (despite the presence of feed) or cows standing in front of the compost-bedded area.

My interpretation of this unusual behavior is that cows are telling us something about the management of the bedding material. If cows avoid walking and laying down on the bed-



Figure 1.

ding, then it is fair to assume there may be something wrong with the bedding. My best recommendation is for one to walk around the barn and experience the footing. When you do so, are you walking on an irregular surface full of holes and hard bumps? (Figure 1). Are you noticing tracks of tractor wheels on the ground? Are you stepping on saturated spots? Most importantly, are you uneasy when walking around your compost-bedded pack barn? If the answer to any of these questions is yes, then very likely you are having trouble managing your compost-bedded pack barn. And if you are hesitant to walk around, then the cows might be as well.

Finding a problem is always easier than finding solutions. So, what should managers do after finding cows are not comfortable in the compost-bedded pack barn? Even though this is extremely hard (but not impossible) to accomplish, sometimes the best answer is to start all over from scratch. This may mean emptying the barn and placing fresh bedding material. After this, maintaining good aeration will become critical to maintain a dry, warm, and fluffy bedding that ensures a comfortable environment for the cows.



Upcoming Events

See [VTDairy](#) for details.

June 8—Franklin County Open Youth Livestock Show

June 13—Dairy night at the Turks baseball game

June 15—State 4-H/FFA Dairy Youth Field Day (Clarke & Frederick Counties)

State FFA CDE (Youth)

June 17—Milk Quality & Products

June 18—Dairy Cattle Evaluation & Management

June 18—Dairy Handlers Activity

Farm Transition and Financial Planning Workshops

(Franklin)

June 18—Transition or Exiting

June 25—Tax Laws/Gifting/More

July 2—Grain Marketing

July 29—QuickBooks Training

TBA—Value Added

TBA—Appraisals

June 22—Farming in the City, Harrisonburg Children's Museum

June 27—Franklin County DHIA Banquet 6:30 PM

July 7-11—Southeast Dairy Youth Retreat, Orange, VA

July 12—VA Dairy Expo, Blackstone, VA

July—Summer Workshops Rockingham (TBA)

August 1—Virginia Colored Breed Show and District Holstein Show

August 2—Farm Safety Day

August 2—Dairy Farmer Appreciation Dinner, Rockingham County Fairgrounds

August 3—Virginia Holstein Show

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.



EARLY SEASON SCOUTING OF CORN FIELDS

—Kevin Spurlin Extension Agent, Grayson County; spurlink@vt.edu

I have often heard that every season is busy season on a dairy. Spring is especially busy with corn planting, manure hauling and hay making. Taking time to scout corn fields during late May through mid-June may be a tough ask with all the other chores, but there is valuable information to be gained. The first, and most obvious reason is to scout for pests. The second reason to scout early is to learn if there were problems with planting. Remember that yield potential is determined first at planting time, and if problems occur then, they cannot be made up even with ideal growing conditions. A seed never planted or not germinating cannot produce a yield!

Scouting for weeds or insect pests is part of an Integrated Pest Management (IPM) program. By scouting, one can avoid blanket pest management activities that waste money or result in pest management failures. Properly identifying pest issues and determining their severity will guide pest management activities so that the best control method(s) and timing are implemented for maximum benefit.

Most every state's Extension service has some form of a crop scouting manual, and many seed companies have them as well. Wisconsin Extension has an easy to access manual which details how to scout a field titled *Scouting Corn: A guide to efficient pest scouting* (J. Doll et. al.). This manual suggests that weed scouting should occur soon after corn emergence, and continue weekly until control measures are no longer feasible. What weeds exist? How prevalent are they? Where are they located in the field? These questions can guide if and when weed control should be done.

Early season corn scouting can uncover root and seedling damage from insect pests such as cutworms, slugs, wireworms, and white grubs. This is a good time to scout for Western corn rootworm if fields had significant adult beetle populations the preceding summer.

Early season scouting is not just for pest issues. While walking fields to determine pest pressure, one can also learn key information about planting success. Do a stand count. How close is the actual stand count to the expected plant population? Are there missing plants? Take a shovel, and dig in the area where a corn plant should be. Is there a seed? Did it germinate, or is it missing? Missing seed indicates skips, which may result from problems with the metering mechanism. Doubles or triples also indicate that metering issues exist and should be addressed before next season.

How is stand consistency? Plants should be relatively the same size. If the stand is inconsistent, especially with skips due to germination failure, dig up a few healthy and weak plants to compare seedling depths. Check to see if weak plants were planted too deep causing a delay in emergence. Several factors related to field conditions, weather and the planter set-up can impact seeding depth, seed-soil contact, and furrow compaction. Planting problems can be managed, but may not always be apparent at planting time. Documented issues that may have occurred at planting serve as a guide for planter maintenance and repair either before the planter is put away, or during the winter leading up to next planting season.

Take time after a spring rain when field work cannot be done to walk corn fields. This can be time well spent not only scouting for current year pests, but also gleaning useful information about planting time so that adjustments can be made next season.

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

Christina Petersson-Wolfe, Ph.D.
Dairy Extension Coordinator & Extension Dairy Scientist,
Milk Quality & Milking Management

“Taking time to scout corn fields during late May through mid-June may be a tough ask with all the other chores, but there is valuable information to be gained.”