

What practices benefit hoof health?

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Part two of our December article:

“Hi Gilles! I’m back to take a look at those cows we talked about.”

“Hi Paul! Get set up and I’ll be right there.”

Since his December visit at Ferme Des Grands Vents, Paul has been concerned about a few cows that, for no apparent reason, had sole hemorrhages. Gilles takes good care of his herd, but with the late harvest and the expansion work, herd management may have suffered somewhat.

“So? Does it look like it’s healing well?”

“Yeah. It looks like it’s on the mend! Did you change anything in your herd management lately?”

“Well, I had a visit from the proAction validator, and I took the opportunity to go over some of our practices in the barn, especially with regard to comfort.”

“Hey, that reminds me! I didn’t have time to tell you about the end of the conference on hoof health at the symposium. It was about practices in the barn!”

A questionnaire on management practices in the barn

Paul explains that as part of their project on hoof health, Valacta technicians and advisers surveyed 85 farms where hoof trimmers are collecting data on lesions. The producers had to answer 45 questions about management practices in the barn and some related to hoof health. The questions focused on:

- Type of housing and access to the outdoors (pasture, exercise yard);
- Stall flooring (mats, mattresses, type of bedding);

- Floor surface in the alleys;
- Cleaning and manual manure scraping, adding bedding;
- Prevention of hoof diseases (use of drying agents, hoof trimming frequency, footbaths and products used);
- Biosecurity (open or closed herd).

Among the 85 farms surveyed, 72 were tie-stall operations (11,755 cows) and 13 have free-stall barns (5,912 cows). Results showed that cows housed in free stalls were 1.6 times more likely to develop a lesion than those in tie stalls, and this was due mainly to digital dermatitis, a contagious disease that occurs more frequently in free-stall housing.

What practices are beneficial?

Manually scraping stalls and adding bedding in tie-stall barns

“Gilles, you should know that the most valuable tool you have in the barn for improving hoof health is your manure scraper!”

“Really!?”

According to the results of the study, manually scraping and cleaning stalls more than five times a day is associated with a significant reduction in sole hemorrhages and ulcers. The benefit appears to be primarily due to the fact that the bedding is replaced under the animal during the scraping operation, increasing the softness of the stall floor. Adding bedding was found to be particularly effective for decreasing the incidence of sole hemorrhages. The results show that 75 per cent of the farms surveyed add bedding to their stalls at least twice a day.

Drying agents

“You were wondering the other day if using limestone in your stalls would be good for hoof health?”

“Yeah, and with my vet, we decided to try it out!”

Based on the study, the use of limestone, or a drying agent in stalls, is beneficial: the practice generally tends to reduce the percentage of lesions in

the herd, with the exception of certain types, like sole hemorrhage and white line lesions (Figure 1).

Access to an exercise yard

Access to the outdoors (pasture or exercise yard), also has an overall beneficial impact on lesion reduction in tie-stall barns, as shown in Figure 2. The effect is significant for both digital dermatitis and white-line lesions. Is this due to softer ground, reduced infection pressure? Additional data and observations are needed to fully explain the benefit.

More frequent trimming would benefit hoof health

“I don’t want to sound self-serving, Gilles, but the results of the project show that more frequent trimming is really good for hoof health! Especially for reducing problems like sole hemorrhages. You’re not done with

me yet, Gilles!”

Although the results show that digital dermatitis and heel erosion increase with trimming frequency (Figure 3), it should not be inferred that trimming frequency is connected to these types of lesions. Because they are contagious and difficult to treat, it’s normal that hoof trimmers see these cows at every trimming visit.

“These are positive results, Paul! Until now, we didn’t have much to rely on. Great team work: you, your colleagues at APOQ, the veterinarians at the faculty of veterinary medicine, and Valacta’s team and database! From now on, I’ll scrape more often, add more bedding and keep using limestone, and I’ll even get you to come more often, Paul! I’ll just have to add some exercise. It’s hard to get it all right, you know! But at least I’ll get the sole hemorrhages under control. I certainly want my cows to be comfortable!”

Figure 1. Percentage of lesions with or without the use of drying agents

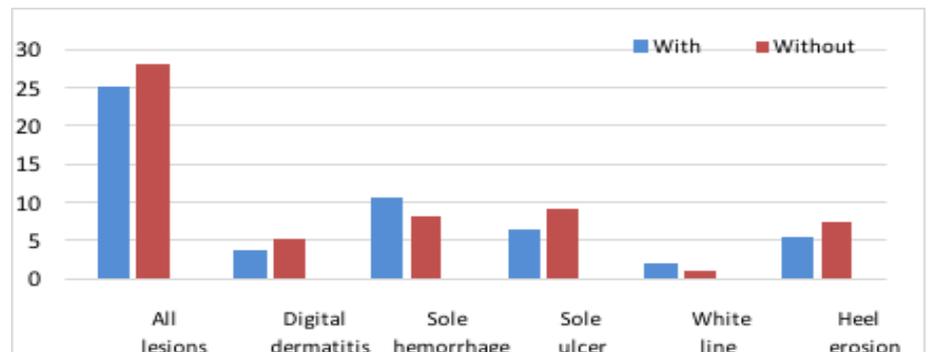


Figure 2. Relationship between hoof lesions and access to an exercise yard

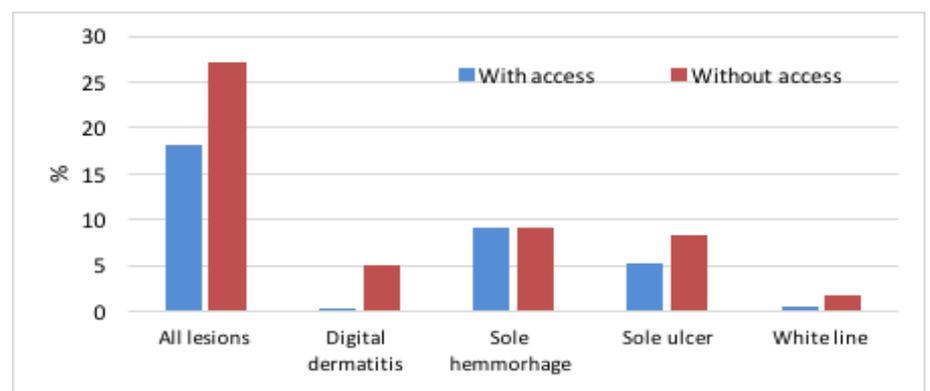
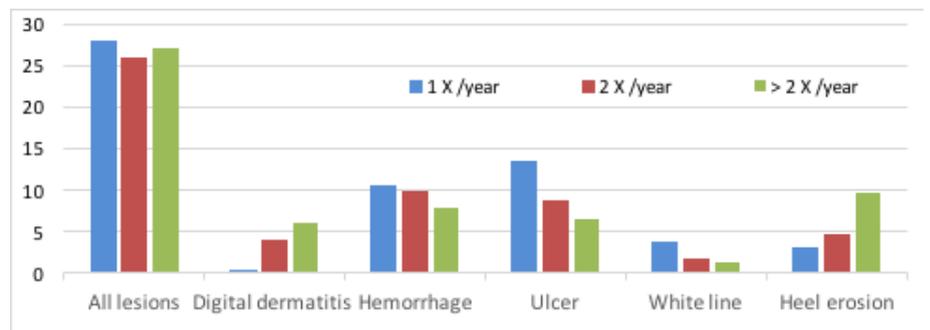


Figure 3. Effect of the number of trimmings per year on hoof lesion prevalence



Results achieved through a project funded by Agriculture and Agri-Food Canada and the Ministère de l’Agriculture, des Pêcheries et de l’Alimentation under the Programme de soutien aux stratégies sectorielles de développement².



Keeping stalls clean, dry and comfortable is key to good foot health.