DATA on the HOOF

What happens when computers are put on hoof trimmers’ crates

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Hoof trimmer Philip Spence
Putting computers on hoof trimmers’ crates could answer questions about management and foot problems in cows

WHEN PHILIP SPENCE AND six other Alberta hoof trimmers pull up with their trimming crate they’re no longer just selling trimmed feet for cows.

Spence is part of a pilot project, called the Alberta Dairy Hoof Health Project in which seven hoof trimmers have outfitted their crates with computers and software capable of recording just about everything you need to know about what they find on that hoof.

Spence was at Anca Enterprises near Stettler, Alberta on a recent fall day, working on the Vanderburg family’s 440 milking cows.

Spence, like many other hoof trimmers, keeps paper records of some sort, but he says those haven’t been well used. The electronic system will make more data available, which will be more easily used by farmers, due to its visual presentation in graphs, and by veterinarians because of its complexity.
“Lameness has been a catch-all phrase.”

Take cow 125 for example, a cow with chronic foot problems, including white line disease on this day. Spence paused from his trimming to tap the cow’s number into the computer using the touch screen. He chose the hoof with the problem, the right rear hoof, then recorded in which zone of the foot the problem is found, in this case zone 3, and then chose white line lesion from the list of diseases found in that foot zone.

Now imagine that data replicated over thousands of cows, and then tie it into CanWestDHI data related to production and reproduction.

That’s the vision of the Alberta Dairy Hoof Health Project, an Alberta Milk-led project in which hoof trimmers and Alberta Milk shared the cost of the Hoof Supervisor computer system in order to better understand dairy farm lameness.

“Lameness has been a catch-all phrase,” says Spence.

The data from this project will show which hoof ailments are more prominent, then tie them to risk factors if enough funding can be found, says Dr. Steve Mason, a consultant who works with Alberta Milk’s Research and Extension Committee and is leading the project.

“Do high-producing cows have more lameness, or specific lameness problems?” he asks.

The answers haven’t been as obvious as one might think. Mason uses the example of alley scraping. It seems intuitive that more alley scraping would mean less lameness, but he says an Ontario study found just the opposite – that farms which scraped more had higher incidences of lameness.

Mason hopes that the funding can be found to get the data sorted by researchers at the University of Alberta.
of Calgary veterinary school, University of British Columbia and the Agriculture and Agri-food Canada research station at Agassiz, British Columbia.

Dairy farmers will also have to agree to hand over their production information from CanWestDHI.

Seven of 10 hoof trimmers in the province are using the Hoof Supervisor system and Mason hopes to get data from 200 of the 600 dairy farmers in Alberta.

One of the first steps was to agree on a standard language for foot problems. The International Lameness Committee, a group of experts on cattle feet from around the world, created a standard system for claw lesion identification in 2008. The project was supported by minerals company Zinpro.

That set the stage for Canadian groups of hoof trimmers, veterinarians and farmers to make sure they are referring to the same thing. That’s also critical in order to record objective data.

Alberta trimmers were the first in the country to adopt the system, in preparation for the use of the Hoof Supervisor computer.

The computer, a military-grade tablet computer, is attached to Spence’s hoof trimming crate. It can be cleaned, and should survive a drop. It will work in more extreme temperatures than most computers.

The Alberta Dairy Hoof Health Project and the hoof trimmers split the cost of the $8000 computer system.

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Philip Spence works on a cow’s hoof

Spence says most hoof trimmers would face a challenge to cash-flow the system without some help.

Hoof Supervisor was created by KS Dairy Consulting in Wisconsin, which has sold systems to hoof trimmers in Alberta, British Columbia and Ontario.

Hoof trimmers have created reports for farmers for years. Many of those reports end up on a shelf and aren’t put to use, says Spence. The reports were mostly raw data. Easier to use are the colourful pie graphs produced by Hoof Supervisor.

That way the farmer gets a snapshot of the lesion trends on their farm and Spence finds they are more likely to share that information with their vet.

For more information on the Alberta Dairy Hoof Health Project, visit www.hoofhealth.ca.