## Stray Voltage Forum Generates Discussion

DAVE LEFEVER

Lancaster Farming Staff

CAMP HILL (Cumberland Co.) — What's the straight truth about stray voltage? How much blame does it deserve for problems in dairy and other livestock performance?

National and local experts gathered here April 9-11 to share their views on what many of them say is an often misunderstood topic.

The forum called "Stray Voltage and Dairy Farms" was organized by the Natural Resource, Agriculture, and Engineering Service (NRAES) of Cornell Cooperative Extension. The Pennsylvania Department of Agriculture (PDA) helped provide funding.

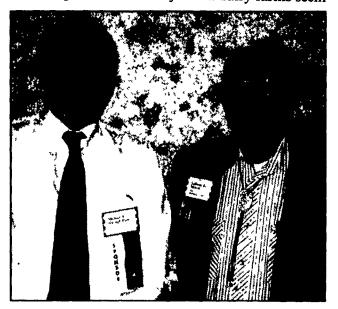
Yes, stray voltage exists, but fears of it are often overblown, according to several investigators in the field who spoke with *Lancaster Farming* before the conference began.

LaVerne Stetson, a former engineer with the USDA, has been a leading stray voltage researcher ever since he first investigated it on a midwestern hog facility in 1976.

According to Stetson, stray voltage is not as mysterious as some people think, and it often gets blamed for problems it doesn't cause.

"We can measure it, analyze it, and correct it," he said. "There's a perception that stray voltage does many more things than it actually does."

Investigations on Pennsylvania dairy farms seem



Michael Stringfellow, left, and LaVerne Stetson are longtime stray voltage investigators who spoke at a recent conference on Stray Voltage and Dairy Farms.

Tom Wilson has been investigating stray voltage complaints on dairy farms in Pennsylvania for three years.



to back up Stetson's assertion.

Tom Wilson, ag engineer and extension agent in northwest Pennsylvania, has been doing on-farm testing and working with utility and service providers in response to stray voltage complaints in the state.

Through a PDA grant, Wilson has investigated about 100 dairy farms over the past three years, ranging in herd size from 20 to 500 cows, housed in various facilities. Producers complained of symptoms potentially caused by stray voltage, such as high somatic cell counts, animal avoidance behavior, and low production.

Wilson said about 5 percent of the farms with complaints had stray voltage levels high enough to affect animal performance. On the majority of the farms, however, stray voltage wasn't an issue.

Symptoms that made the producers suspect possible stray voltage "could come from a hundred other causes," Wilson said, including poor milking and other management practices.

On farms where stray voltage was a problem, Wilson found it was generally caused by improper wiring.

"Wiring is the biggest issue," Wilson said. "If it's on the farm, it usually just takes a good electrician" to eliminate stray voltage. Sometimes bad wiring was found on newer facilities as well as older ones.

In cases where the utility company is at fault, they are usually easy to work with in correcting the problem, Wilson noted.

A big part of Wilson's job is providing solid, scientic information to producers in order to overcome irrational fears.

"The problem with stray voltage is, once it gets mentioned, people get fixated on it," he said.

Also on hand was Michael Stringfellow, chief sci-