

PSEUDORABIES HEADLINE UPDATE

A column to update hog producers on the Pennsylvania Pseudorabies Eradication Program.

PSEUDORABIES SUCCESS STORIES

Paul M. Pitcher, DVM, MS
Assistant Professor
Swine Health
And Production
Management
University Of
Pennsylvania
School Of
Veterinary Medicine
New Bolton Center

Those of us who are involved with pseudorabies are frequently impressed by the accomplishments of quarantined swine producers who are committed to cleaning up their herds. This article documents such a case in a Lancaster County herd.

Experience has shown that eliminating pseudorabies from large finish floors can be a very challenging task. The virus finds conditions in such herds comfortable

and very favorable to its survival. Large infected finish floors usually have many pigs which are actively shedding virus into the environment to infect any pig which has not yet been exposed.

The large concentration of pigs in one facility means that it is not difficult for pseudorabies virus (and many other disease agents) to be transferred from pig to pig. Stress factors, such as dust, uneven temperature and ventilation, or crowding are often the core of a problem in large herds and can make disease control difficult, particularly if the flow of pigs through the building is continuous.

This case involves a large continuous flow finish floor of over 5,000-head capacity which was quarantined in 1992, after infected feeder pigs were moved to the facility from a quarantined breeding herd. Pseudorabies became established at this finish floor. Later, uninfected pigs were supplied by the breeding herd, but blood testing showed that all pigs

were being infected with pseudorabies by the time they had been at the finish floor for four weeks.

Pneumonia and poor growth rate were also problems at this facility, so in the fall of 1993, the decision was made to switch the flow of the facility from continuous to all-in/all-out by room. That is, each of the nine rooms would be filled over a two-week period, pigs would remain in the same pens until ready for slaughter, and then the entire room would be emptied before it was refilled with young pigs.

At the same time pig flow through the facility was changed, vaccination of pigs for pseudorabies was initiated. Pigs received a single dose of pseudorabies vaccine at nine weeks of age, on the day they were moved from the nursery to the finish floor. Several groups of pigs were ear-tagged and blood-tested every 2 to 4 weeks to determine the patterns of infection in the herd.

The first series of blood tests was done three months after vaccination was started and showed that only about 20 percent of pigs were responding well to the vaccine and that pigs were still becoming infected at around 13 weeks of age, even though they were vaccinated. These results were not surprising, as many pigs vaccinated for pseudorabies at such a young age do not respond well.

So much virus was still circulat-

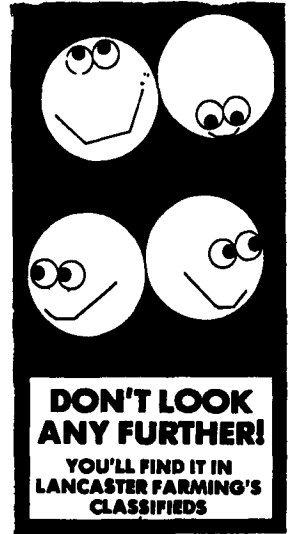
ing that it was overwhelming any protection provided by the vaccine. Although the producer was discouraged, he realized that if vaccination was continued, there was a good chance that virus levels would gradually decrease, eventually allowing pigs to remain uninfected.

Two months later, blood testing showed that vaccinated pigs were not becoming infected until 17 weeks of age, so progress was evident. By this time, all pigs in the facility had received a dose of vaccine. After two more months, another blood test was done. By this time, vaccine had been in use for seven months. This blood test showed that pigs were remaining uninfected all the way through market weight and age. However, some infected pigs were still on the premises, so a final blood test was planned. This final blood test, done nine months after pseudorabies vaccination was started, showed that pseudorabies had been completely eliminated from the facility.

This case demonstrates that changes in pig flow and use of pseudorabies vaccine can produce rapid results, even in herds expected to be difficult to clean up. The transmission of virus from infected pigs to uninfected pigs was completely interrupted sometime between 3 and 4 months after vaccination was initiated. These

results were obtained without any disruptions to pig marketings or to work practices on the farm (other than the labor to inject vaccine). Apparently, the added separation between groups of pigs, combined with a reduction in virus shedding brought about by vaccine use, succeeded in stopping the spread of pseudorabies in this herd. The incidence of disease symptoms also decreased.

The neighboring swine producers are delighted that the pseudorabies threat imposed by this farm has been eliminated. We will be reporting in a later issue on changes in growth performance on this farm and others which have successfully eliminated pseudorabies.



See the New
"STRATFORD CLASSIC" Coal Stoves
at

**DUSSINGER'S
QUALITY STOVES**



2533 Old Phila Pike, Rt 340, Smoketown, PA
3 miles east of Lancaster
Tue., Thurs., & Fri. 10-8;
Wed. & Sat. 10-5

* See our beautiful new Wood & Gas Stoves.


(717)397-7539



WIFO

3 Point forklifts
Wide selection of models
Lift heights from 5' to 12'
Lift capacities from
3500# to 4400#
Ideal for seed/fertilizer
pallets
Orchard crates
All-around utility use
Top quality construction -
economically prices

See Your Local Dealer For
More Information or Contact:



**CUMMINGS and
BRICKER, Inc.**

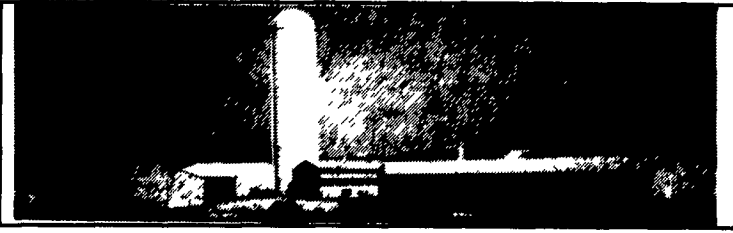
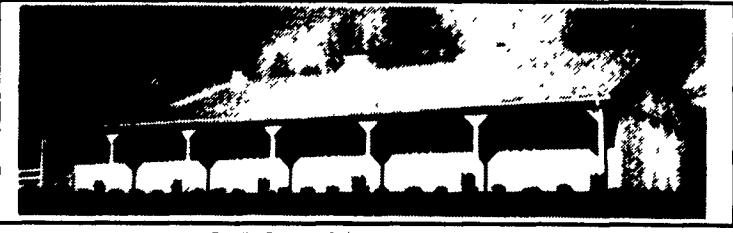
100-120 Lehigh Ave
P.O. Box 928
Batavia, New York 14021-0928
716/343-5411
FAX 716/343-0346

100 Stover Drive
Carlisle, PA 17013
717/249-6720
FAX 717/249-9384

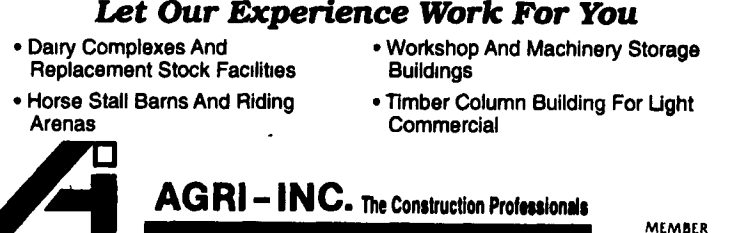


AGRI-INC.

Custom Built Farm Buildings
Designed To Your Needs





HEIFER BARN & TIE-STALL BARN




HORSE STALL BARN
Let Our Experience Work For You

- Dairy Complexes And Replacement Stock Facilities
- Workshop And Machinery Storage Buildings
- Horse Stall Barns And Riding Arenas
- Timber Column Building For Light Commercial



AGRI-INC. The Construction Professionals



151 E. Farmersville Road, Ephrata, PA 17522
• (717) 354-4271
Serving The Agriculture Industry For Over 25 Years

Germania Dairy Automation Inc.

is proud to announce authorized dealer status of...

DAIRY PARLOR SOLUTIONS

operating
division of *Fisher and Thompson, Inc.* serving Southeastern
Pennsylvania and Northern Maryland.

Germania Solid engineering, reliable performance -
No compromises. A LEADER IN DAIRY AUTOMATION.



**DAIRY
PARLOR
SOLUTIONS**

division of
Fisher and Thompson, Inc.
15 Newport Rd
Leola, PA 17540
717-656-3307