

## Pseudorabies

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of problems, including abortions, still births, and breeding problems. Respiratory diseases such as pneumonia are often intensified when a pig's immune system is weakened by PRV virus, and in an acute outbreak, PRV can cause 100 percent mortality in pigs under two weeks of age.

According to Dr. Max Van Buskirk, director of the Pa. Department of Agriculture's Bureau of Animal Industry, as of April 30 there were 23 breeding herds and 22 feedlots under quarantine in the state, with the disease centered in Lancaster County. Most of the infected herds are located in the Ephrata and Manheim areas and some producers have been re-infected as many three times.

But while 45 herds are under quarantine, only 11 have submitted a written cleanup proposal required by the state, said Van Buskirk.

"We have too many herds under quarantine that don't have any program filed with the state," said Larry Hutchinson, noting that the meeting's goal was to get herd owners to file a plan with BAI, and "to encourage those avoiding detection to come out in the open and get some help."

Producers who choose to limp along with the disease can expect PRV to increase their cost of production by 8 to 10-percent in the average farrow-to-finish operation, according to experts. But Leroy Biehl said there is no reason to live with PRV in light of the current ammunition available to wipe it out.

In Feb., 1985, Illinois passed state feeder pig regulations requiring producers to test sows for PRV before their offspring could be shipped. The statute pertains to pigs brought into the state, as well as those moved within the state.

In January of this year Illinois instituted a cleanup program, and thus far producers of 252 herds have implemented cleanup programs. The plans take one of three basic forms, according to Biehl.

**Plan A, Depopulation-** This is the last resort. If a high percentage of pigs test positive for the virus, herd genetics are not exceptionally valuable, there are other disease problems and all the pigs breathe a common air source, depopulation may be advisable. A producer-controlled depopulation board reviews the herd situation and may

recommend this if other options fail.

**Plan B, Test and Removal-** Pigs are tested at 30-day intervals and positives are removed. If, after four tests, more than 1 percent are still positive this method is abandoned. When herd size is small and the percentage of positive pigs is low this approach is often workable.

**Plan C, Offspring Segregation-** Baby pigs from positive sows are segregated at three to four weeks of age, tested at 16 weeks and removed if PRV antibody is present. The original infected sows are depopulated. This option is considered if isolation facilities for the baby pigs are available. An alternative to this plan involves transferring embryos from infected sows to uninfected recipient sows. Embryo transfer can be justified only in herds of high genetic value.

Biehl said that the cost of implementing the three plans has been estimated at \$1 per sow for test and removal, \$29 per sow for offspring segregation and \$146 per sow for depopulation. When testing is required the state pays costs incurred from a local veterinarian and lab fees.

The Illinois veterinarian said that vaccination has played a key role in helping to eliminate the virus. The three basic types available—killed, modified live and subunit vaccine—are all being used, he said. In an acute outbreak vaccine helps to limit death losses and also helps to limit secondary disease problems by eliminating the PRV virus. Vaccine also protects nursing pigs when sows pass on their acquired immunity.

Biehl did point out, however, that blood tests will not distinguish between a recently vaccinated pig and one carrying the active virus. After about two months, though, pigs vaccinated with killed vaccine will test negative for PRV. He also noted that the duration of protection provided by vaccine is unknown. One other disadvantage of vaccination is its cost, with injections costing between 75 cents and \$1.50, plus the services of a veterinarian.

BAI's Van Buskirk said that the bureau is receptive to the idea of using vaccine when certain conditions are met. Herds must be quarantined to use vaccine, and all animals testing positive for PRV are to be removed within 18 months from the start of the vaccination program. "However, we would review the plan and would consider extending per-



Dr. Leroy Biehl

mission to use vaccine (beyond 18 months)," said the bureau chief.

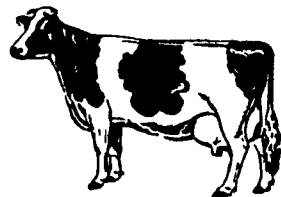
Presenting the meat packer's perspective, Jerry Clemens of Hatfield Packing noted "a number of these (PRV) hogs are coming to this facility," and that Hatfield plans to continue to cooperate with producers who have infected herds. He did warn, however, that restrictions from the state involving the handling of infected pigs could make processing PRV pigs prohibitively expensive. At present, Hatfield has no truck washing facilities or separate unloading chutes for infected pigs. He also pointed out that "a lot more problems on the slaughter floor," are evident in infected pigs and the condemnation rate is significantly higher. Although the virus itself has no effect on meat quality, secondary disease problems may have an effect.

Clemens recommended that the state consider setting up a buying station for the purpose of taking only infected pigs.

Van Buskirk noted that, while all infected herds must be quarantined, Pennsylvania imposes no restrictions on the movement of hogs to slaughter. He said that producers are requested to cleanup within eight months and a \$100-per-sow "incentive" payment is being offered on all infected sows removed from the herd within 90 days of quarantine.

The bureau chief said BAI is looking for a "clear signal" from the state's pork industry as to whether producers want to live with the disease or eradicate it. "We feel the entire industry ought to get behind the 10 percent (of producers) that's footing the bill," he said.

## Major Dairy Sales And Dispersals Nationwide



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high price of \$4,050. She produced a top record of 11,328 milk with 609 fat. The dam's best effort stands at 11,007 milk and 601 fat.

The NEW ENGLAND GOLDEN BONUS SALE held in conjunction with the annual sale averaged \$1,125 on six young calves.

A bid of \$2,000 on an April 1986 calf topped the sale. She is sired by Fascinator and out of an EX-91 Earl dam. She has records to 17,640

milk and 760 fat. The next dam is EX-90 with 23,700 milk and 1,000 fat.

Selling for the next high price of \$1,600 was a September 1986 Duncan daughter. She is out of a VG-83 Samson daughter with three lactations averaging 15,333 milk and 690 fat, ME.

Harold Wright managed the sales and C.W. Gray and Sons auctioneered the events.

## PSU Agronomy Grad

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And the programs shifted gears from the social life of the groups into agricultural training and public health. That's when Musser came into the program.

"In 1985 we worked with 15 farmers," Musser said. "And even with a dry year we were able to get real good results—about 400 percent increase in yields over traditional harvests. Actually, a lot of farmers had no yields that dry year. In 1986 the program increased to 20 groups that amounted to 200 people learning how to better feed themselves. They not only learn the lessons, but they grow a technique garden as part of the educational process. Again, the farmers experienced a 400 percent increase over traditional gardens."

"This year enthusiasm is very high. And now it's not the techniques we need, it's the administrative capacity to work with all those people who want to learn. We have about 65 groups now enrolled with close to 700 people in the agricultural education programs. We have hired 10 more educators, 15 in total," Musser said. "And my roll has changed from teaching techniques to staying in the office to train an administrator. One of the original animators as been hired as the administrator. But he or no one else in the community has had any background in accounting and accountability. So we need to start teaching from the basic principles."

"In these educational plots, fertilizer is used at the rate of a spoonful to each hill of corn. Fertilizer costs about \$8 for a 50 pound sack of 20-10-10. But the

farmers are still so poor that they cannot pay for the sack of fertilizer at planting time. So a credit program has been set up where the farmer pays one fourth down and the remainder of the money at harvest. Of course this adds to the administrative work of keeping books for 700 people getting a sack of fertilizer."

"Everybody has a few goats and chickens. There are a few cows. And pigs are in a repopulation program. Several years ago all the pigs in Haiti were killed because of African swine fever. Now the population of hogs is being replenished mostly with hampshire, yorkshire and duroc breeds."

"Plans are being made for the Inter-American Foundation, which is a foundation of the U.S. government to continue the project when MCC leaves the country in 1989. We hope we can get a few of the teachers into further education channels. And hopefully they have a conscience now and will want to come back to their home as educated teachers. We would like to see a Haitian agronomist working in town."

There are six Americans working on the MCC project in Mombin Crochv. It's a small town of about 2,000 people, and the outlying areas would total about 20,000 people. We tend to balance what the missionaries are doing. We don't plant churches, but we do work with a lot of church leaders. If we find a need, we call in a missionary."

"Teaching these farmers to improve their lot somehow seems to me to complete the message of the gospel," Musser concluded.

## Potassium In Fruit, Vegetables Provides Stroke Protection

NEWARK, Del. — Eating a banana, half a melon or a bunch of fresh asparagus may be one way to protect yourself from a stroke.

All these foods contain a high level of potassium and recently released research findings show that potassium can protect against stroke, says Dr. Sue Snider, University of Delaware extension nutrition specialist.

"Early studies of hypertensive rats showed that a high intake of potassium protected against stroke, even though the blood pressure was not affected," Snider says. "And now a 12-year study of 859 men and women between 50 and 79 years old living in southern California confirms this concept."

The study shows that one serving of fresh fruit or vegetable a day (a 390 mg. increase in daily potassium intake) was associated with a 40 percent reduction in risk of stroke.

"This protective effect was observed to be independent of overall diet and known cardiovascular risk factors such as age, sex, blood pressure, blood cholesterol level, obesity, fasting blood glucose level and cigarette

smoking," the specialist says.

However, there's no reason to go out and buy potassium supplements, she adds. The study's authors say the findings do not support the broad recommendation of a high-potassium diet for the general population.

"But increasing the amount of fruits and vegetables — particularly fresh fruits and vegetables — in a well-balanced diet appears to help protect against stroke," says Snider. People who eat out a lot may find it difficult to get a variety of fruits and vegetables, she notes, but salad bars can help.

The nutrition specialist gave these examples of the potassium levels in popular fruits: one average size apple has 159 mg of potassium, one banana has 451 mg and one-half cantaloupe has 825 mg. For one-half cup of the following vegetables the potassium contents are: cooked fresh spinach, 410 mg; asparagus, 219 mg; beets, 266 mg; potatoes, 256 mg; and snap beans, 185 mg. One raw carrot has 233 mg of potassium.

**POOL PUMP SALE**  
See EECO Ad Pg. C-34

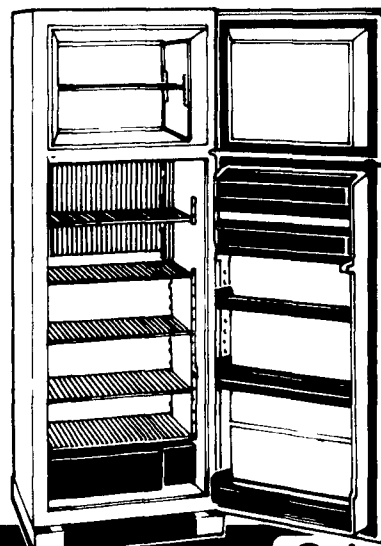


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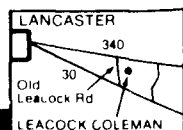
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