# Minnesota Vet Discusses Swine Health Problems

#### BY SALLY BAIR Lancaster Co. Correspondent

MANHEIM – Conrad Schmidt, a veterinarian in private practice in Minnesota and a columnist for National Hog Farmer, told south central Pennsylvania hog producers that they must become interested in nutrition and the environment to be successful.

Speaking last week at a meeting sponsored by Timothy Trayer, D.V.M., Schmidt said, "Every disease is part of the environment. There are 27 things that can go wrong on farms every day to cause stress which causes disease."

Addressing the economic effect of deaths, Schmidt said, "You are robbed when you lose a pig." Because of the importance economically, he urged producers to keep death records.

Pneumonia, he said, has the biggest effect economically in Pennsylvania, followed by infertility and reproductive problems.

He also urged herd health profiling to help in managing problems. "History is the main ingredient of a successful diagnosis." Schmidt said. "You must share what you see so the veterinarian can make a good clinical evaluation." Post mortems should always be conducted. He added, "You should set realistic targets and keep track of deaths."

Schmidt called blood testing important, especially for anemia, adding, "If you don't have healthy blood you don't have healthy pigs."

Other aspects of a herd health profile that are important include checking for parasites, culturing, sensitivities, drug usage and drug response.

#### Drug Usage In Feed

Schmidt pointed out that USDA is going to begin spot checking for drug withdrawal on slaughter animals, and added, "We have to be protectors of what we're selling. Drug usage and drug response has to be continually monitored."

Schmidt added, "We need to have diagnostic work done on our farms to understand drugs. Each farm should have sensitivity work done."

Questioning the attitude of "throwing something on the feed" to treat disease, Schmidt asked, "Does a sick pig eat?" He added that only five to 10 percent of any hog population needs the dose being given. "The most effective way to treat is by injection," he said.

Schmidt encouraged the breeders to decide their disease priorities, ranking diseases and their importance. He suggested working with the number-one problem, saying that number six and seven will probably go away.

He urged producers to be aware of antibiotic usage and restrictions, and to be sure to note resistance. He said prevention should be by immunization, adding, "This is the key, especially where there's not a lot of outside exposure." Learning about disease control is vital to the economic survival of the pork producers, he stressed. "You should fit each step into a long range program."

Schmidt called the sow the key any successful disease program, adding that sanitation and cleanliness are of supreme importance. He noted, "Any overwhelming exposure will override a given immune level. You cannot cheat on sows."

Discussing immunities, Schmidt said passive immunities are those that are very short, like colostrum, and acquired last for longer periods of time. He pointed out that in any litter there will be some pigs that will not be effectively protected by cholostrum.

"You can increase the herd immunities by management, diagnosis and vaccination," Schmidt added, saying, "You should limit cost to \$1.50 per pig marketed on the total anibiotics on your farm. No more than eight



percent of the ration cost should be antibiotics." Schmidt added, "Herd vaccination can lower antibiotic usage."

One limiting factor in hog production is the environmental issue, Schmidt noted. He said immunization should be increased before known exposure, and the sow should be vaccinated to protect the nursing piglet.

According to Schmidt, a good vaccination program will cause a decrease in specific bacterial problems, and increase response to antibiotics and will shorten disease outbreaks, allowing pigs to come back faster after diseases. Dealing With

#### Rhinitis

Discussing the specifics of rhinitis, Schmidt said that 100 percent of all herds have rhinitis, though it may not be infectious. "Some kinds are costly to you. You must decide what kind of rhinitis your herd has."

Schmidt said that the disease cost pork producers \$210 million in 1984. Nearly 70 percent of tested hogs have rhinitis that is detectable to the naked eye. "It affects the average daily gain and it can specific door to some types of perunonia." It to anonia, he note if can also affect average daily gain

Bordetella bronchiseptica and Pasteurella multocida, Type A are primary culprits in disease. While Pasteurella is not costly in itself it sets up the environment for other organisms to get in, Schmidt said.

Schmidt concluded, "If your vaccination and feed medication program isn't working, challenge your vets to get with it." He added that it is essential to have a preventative program with incoming boars.

He said that atrophic rhinitis is "more than just a bug problem. It is a management problem, and you must be willing to implement a program. You must know how much it costs and you must understand the problem."

Schmidt said that housing has the most direct effect on the severity of disease, and both density and ventilation must be controlled. He said finishing buildings are often too concentrated and animals are mixed too often.

While nutrition is not a real cause of rhinitis, Schmidt said that sows must be fed adequately to produce colostrum so they won't be

## World's Largest Livestock Show Begins Nov. 8

LOUISVILLE, Ky. - The 1986 North American International Livestock Exposition opens Nov. 8 and continues through Nov. 21. Livestock breeders from across the nation will participate. The exposition, now in it's 13th year, has become the largest, all-breed, purebred livestock show in the world and is expected to attract nearly 14,000 entries, according to Harold Workman, Manager. Six livestock types will be featured, including beef cattle, dairy cattle, swine, sheep, quarter horses and draft horses. According to Workman, virtually every livestock breed will be represented in the six livestock categories, bringing total shows and livestock sales during the 2-week exposition to nearly 100. Pennsylvania's will be among those vying for top honors. Paul D. Miller of Spring Grove will be showing two head of Charolais beef cattle, and the number of sheep exhibitors includes Margaret Herr, Narvon; Tim and Sarah Fleener, Lancaster; and William MacCauley, Atglen. Jack Ragsdale, Chairman of the NAILE's Executive Committee, announced that the big exposition will also feature an expanded group of activities that will interest both livestock breeders and the general public. Ragsdale said,

"The North American will again feature Championship Rodeo Finals which are PRCA sanctioned; a barnyard featuring baby animals; many junior livestock events and a variety of sales. The Agri-Products Show returns this year and has been expanded to include free country music shows and a wool products/demon-

stration exhibit."

Also new this year is the Saddle and Sirloin Club, a "Members Only" lounge which follows in the tradition of the Saddle and Sirloin Club located at the old Chicago International Livestock Show.

The show is sponsored by the Commonwealth of Kentucky and the Kentucky State Fair Board.

#### NAILE To Host Angus Activities ST. JOSEPH, Mo. – Angus Its Open Committee Meeting thus



Minnesota veterinarian Dr. Conrad Schmidt (left) talks with Dr. Timothy Trayer following a meeting with local pork producers last week.

carriers of the disease.

Resistance to the disease can be carried through genetics and heredity, and crossbreeding can be successful in getting it out.

Death records will be helpful in understanding the disease and will how the economic cost of the unit ases to the herd.

Schnidt made it clear that he has been impressed with the Lancaster County hog farms he visited during his stay here. He said, "Producers are conscientious and have a good attitude toward cleanliness and toward the en-

vironment. There are a lot of good things going on here."

Trayer, of Hutchison and Trayer Veterinary Associates, Denver, discussed the "Pig Champ" computer program which he uses with clients for herd analysis. Originating from the University of Minnesota, the program gives basic information in helping producers identify the strengths and weaknesses of their herds.

With the program, producers can identify the top sows in the herd, and save replacements from the top 20 to 30 percent.



### Winterizing Cooling Systems

There has been disagreement, in the past, about the advisability of evaporative cooling for chickens in Pennsylvania. Some individuals questioned the use of a cooling technique that would raise relative humidity in the poultry house because the higher relative humidity decreases the ability of the bird to shed heat through the respiratory tract. Because evaporative cooling reduces the dry-bulb temperature to near the wet-bulb temperature, others questioned the effectiveness of an evaporative cooling system in a

for effective water evaporation.

Evaporative cooling systems should not be needed again until next summer. Therefore, producers with houses that contain an evaporative cooling system should winterize them at this time. The procedures for winterizing existing misting systems are as follows:

1. Open up the end of each line and drain any water that may be in the line. This will prevent the water from freezing during the winter and breaking the line. In addition, it will prevent any deposits from collecting in the pipe or nozzles. 2. Remove all nozzles and soak them for 10 to 20 minutes in approximately an 8 percent solution of hydrochloric acid. This can be prepared by diluting common swimming pool muriatic acid 3:1 with water. Dilute the acid in a plastic or glass container; do not use a metal container.

breeders nationwide will travel to Louisville, Kentucky, in mid-November for the 103rd Annual Meeting of the American Angus Association and several other Angus activities, all held in conjunction with the North American International Livestock Exposition, reports Richard Spader, executive vice president of the

American Angus Association. Some 350 delegates from 47 states and Canada have been elected by members of the national association to represent their respective home states at the Annual Meeting set for 2 p.m. on Monday, November 17 at the Kentucky Fair and Exposition Center. Delegates will cast their votes for a new Association president and vice president, and elect five new directors to serve three-year terms.

Instead of the association having

its Open Committee Meeting this year, it is co-sponsoring the 'Saddle & Sirloin Roundtable ''Breeder Destiny'': An Idea Dialogue in Honor of Dr. Frank Baker'. It will be held on Sunday, November 16 from 1:30 to 4:30 p.m. at the Exposition Center.

Later that evening from 6 to 8 p.m. is the Angus Reception. It will be held at the Executive West

The Roll of Victory Angus Show will start the day's activities off at 8:00 a.m. on Monday, November 17. Randall Grooms, Overton, Texas, will judge Angus females on Monday and the bulls will show at 9:00 a.m. on Tuesday, November 18.

The Annual Banquet is set for 7 p.m., Monday, at the Executive West. The featured speaker at the banquet will be Ray Wilkinson, a farm broadcaster for WRAL-TV in Raleigh, North Carolina. high humidity climate.

Research has indicated the beneficial effect of lower dry-bulb temperature exceeds the detrimental effect of higher relative humidity. Analysis of weather data for Pennsylvania reveals that high humidities do not accompany high dry-bulb temperatures. From this observation one would conclude that evaporative cooling is more suitable to Pennsylvania poultry buildings than originally considered.

The end result has been the increased use of evaporative cooling systems in Pennsylvania poultry houses. These installations utilize misting or fogging systems instead of the more expensive pad system. These misting systems utilize water pressure and orifice diameter of the nozzles to achieve the desired droplet size required WARNING: ACID IS CAUSTIC-- DO NOT GET IN EYES, MOUTH OR ON SKIN!

3. Remove nozzles from solution and rinse with water.

4. Replace nozzles.

5. Service the pump in accordance with the manufacturer's recommendations.

A small investment in time now, to properly winterize a mist evaporative system, will pay dividends when the system is once again needed next summer.