MSU Pork Quarterly

Vol. 8, No. 4 "Information for an industry on the move!" 2003

MAEAP "Progressive Planning"

Jerry May, AoE Swine Agent, Ithaca, Michigan

The Michigan Agriculture Environmental Assurance Program has a new opportunity aimed at assisting Michigan's livestock producer's participation in environmental stewardship and the MAEAP program. "Progressive Planning" offers farmer's the opportunity to work toward completing a comprehensive nutrient management plan (CNMP) in phases, at a lower cost, in a time frame the producer chooses, and with the assistance of a MAEAP Project Coordinator, who will assist the producer in outlining and achieving environmental goals. A completed CNMP is not a pre-requisite for program participation, but is still required for verification in the MAEAP Livestock System..

Often times when faced with CNMP development farmers become disenchanted by the size of the task. "Progressive Planning" breaks the development of the CNMP into nine individual steps. After a farm site review, producers choose which step they are most comfortable with completing first, and in what order the steps will be completed. The role of the MAEAP Project Coordinator is to help analyze the farm, assist with step prioritization, insure that the farm is making progress, and provide the farmer a list of resource people who will assist with the completion of each step.

The nine steps of "Progressive Planning" include all the CNMP planning processes of soil testing, field mapping, manure nutrient calculation, and conservation planning. The unique steps of "Progressive Planning" include:

Assignment of a MAEAP Project Coordinator who will help the farm gather information and prioritize steps in the planning process.

MAEAP Phase I education meeting participation prior to the completion of a CNMP.

For farms with less than 1,000 animal units "Progressive Planning" offers CNMP development at a schedule that is determined by the producer. Producers choose the pace of their CNMP development. Helping the producer determine how quickly the farm will move to a completed CNMP is one of the responsibilities of the Project Coordinator. For farms with over 1,000 animal units "Progressive Planning" will insure that the farm makes timely progress towards CNMP completion.

The current Michigan Department of Agriculture, Michigan Department of Environmental Quality and United States Environmental Protection Agency agreement requires that farms with over 1,000 animal units (2,500 finishing hogs) must be in the process of CNMP development and eventual MAEAP Verification or seek coverage under the state's NPDES general permit by September 2005. Farms with less than 1,000 animal units are not required to meet those same requirements, but must realize that being proactive and documenting environmental stewardship now, will be beneficial to the farm in the future. Regulations that currently apply to farms that exceed the 1,000 animal unit threshold, may someday, in the not to

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What's Inside ...

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Funded by The Animal Initiative Coalition Grant Program

distant future, apply to smaller farms as well. Farms who voluntarily begin the planning process now, will find the transition to a more regulated environment smooth and less time consuming

In the past MSU Extension, under the leadership of Tim Johnson and Joe Kelpinski, played an important role in assisting Michigan's pork producers with the National Pork Board's "On Farm Odor – Environmental Assurance Program" (OFO-EAP). Producer participation in MAEAP "Progressive Planning" will build on the foundation of environmental stewardship that the OFO-EAP established.

How does a farm enroll in MAEAP "Progressive Planning"? Attend one of the MAEAP Phase 1 meetings held through out the state this winter. "Progressive Planning" sign-up forms will be available at these meetings. If a farm has attended previous a MAEAP Phase 1 meeting, sign-up is available by contacting MAEAP directly at (517) 241:4730 or on-line at http// www.maeap.org

"How Warm for Weaned Pigs?"

Ronald O. Bates, Extension Swine Specialist
Michigan State University

Environmental conditions for newly weaned pigs are an ongoing debate. There have been many studies to document, temperature requirements, nutritional requirements and space requirements. However most of these studies were done with pigs that were weaned at older ages (greater than 21 days). In addition, studies that have evaluated the room temperatures needs of weaned pigs have looked at it from a "steady-state" environment. In other words the room temperature remained relatively constant for the duration of the study.

In a recent report from Canada[a], the room temperature of pigs weaned at 12-14 days was studied. Pigs could control the temperature throughout the day and make the room either warmer by turning on a heat lamp or cooler by turning off the heater. There were 8 groups of pigs studied over a 6-month period. Temperature information is reported for pigs at 3-5 days after weaning, 10-12 days after weaning and 17-19 days after weaning.

The results indicated that pigs preferred a diurnal heat pattern. Pigs preferred it cooler from midnight to 6 am, and liked it warmer from noon until 6 to 7 pm in the evening at which time they began to cool down the room. From Figure 1, it can be seen that younger pigs, 3-5 days after weaning, preferred a warmer room than pigs that were older, 17-19 days after weaning.

It was also reported that the average temperature for the pigs 3-5 days after weaning was 77° F while the average temperature for pigs at 17-19 days after weaning was 75° F. The maximum temperature that pigs had the room was 84° F while the minimum temperature was 69-70° F.

The report also mentioned that pigs did decrease temperature in the room by approximately 1.5 to 2° F per week. Younger pigs wanted a warmer room but as they got older they decreased the average room temperature.

This report provides some very interesting insight to what the pig would want in room temperature versus what is often applied under commercial conditions. From this study, 12-14 day old pigs had the room at a maximum of 84° F. However, they liked to have the room temperature change through the day by as much as 6-7° F. Many nurseries are started at temperatures higher than 84° F and the temperature is often controlled so that the room temperature does not fluctuate more than 2° F, throughout the day.

There are several items to keep in mind as producers evaluate their nursery environment. Pigs with greater health or disease challenges may have a higher temperature requirement than pigs that have less disease or health challenge. Room temperature at the pig level may be

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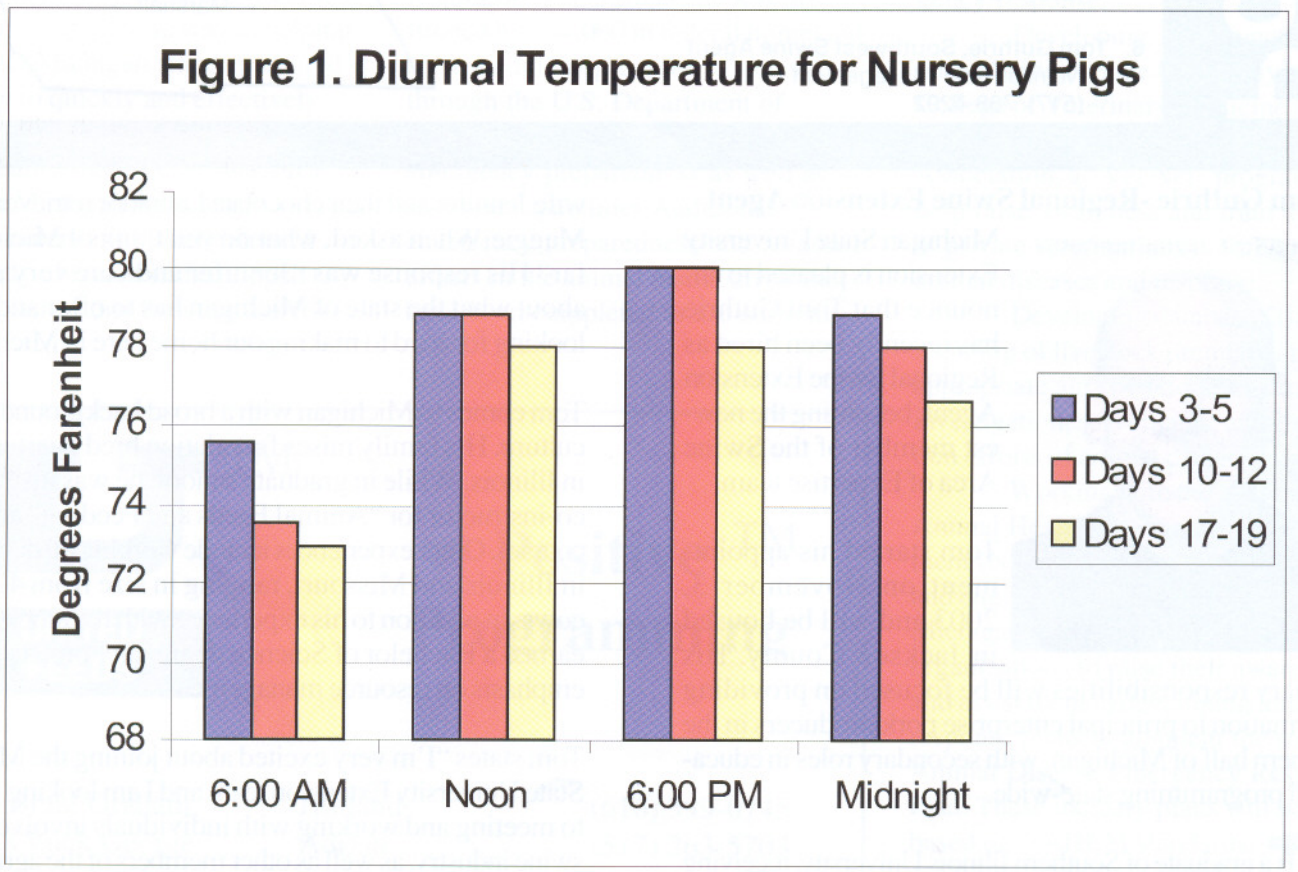
several degrees lower than at 4-6 feet above them where, too often, is the temperature sensor that controls heating and ventilation. Temperature should be measured at the pig level.

The ventilation system can also be a factor. Ventilation systems that cause cold drafts across the nursery pigs can lower the effective temperature in the room and cause a "Wind Chill".

As we head into winter, producers should check to see if they might be keeping their nursery rooms warmer than is needed. However producers should also evaluate temperature at the pig level. In addition, possible drafts and cold sleeping surfaces that could be lowering the effective temperature should be assessed. As propane and natural gas costs go up, possibly turning down the thermostat in the nursery could reduce heating costs this winter.

[a]Bench, C.J., and H. Gonyou. 2003. Thermoregulation of the Nursery by Early Weaned Piglets Throughout Operant Condition. Prairie Swine Centre, Saskatoon, Saskatchewan, Canada.

Figure 1. Diurnal Temperature for Nursery Pigs



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All comments and suggestions should be directed to:

MICHIGAN STATE UNIVERSITY EXTENSION

Tom Guthrie -Regional Swine Extension Agent

Michigan State University Extension is pleased to announce that Tom Guthrie has recently been hired as Regional Swine Extension Agent, becoming the newest member of the Swine Area of Expertise team.

Tom started his appointment on November 3, 2003 and will be housed in Jackson County. His primary responsibilities will be focused on providing information to principal enterprise pork producers in the southern half of Michigan, with secondary roles in educational programming state-wide.

Tom is a graduate of Southern Illinois University, receiving a Master of Science degree in Animal Science with a swine nutrition specialization. His research focused on the nutritional value of a specific genetically-modified corn for growing pigs.

Originally from Illinois, Tom moved to Michigan with his wife Jennifer and their chocolate Labrador retriever named Maggie. When asked, what do you think of Michigan so far? His response was "Jennifer and I are very pleased about what the state of Michigan has to offer and we are looking forward to making our home here in Michigan."

Tom comes to Michigan with a broad background in agriculture. His family raises foundation bred quarter horses in Illinois. While in graduate school, he was instructor or co-instructor for "Animal Feeds and Feeding" and other courses. Other experiences include working on dairy farms in Illinois and Missouri, ranging in size from 40 to 400 cows. In addition to his experience with livestock, he also earned a Bachelor of Science degree in Forestry with an emphasis on resource management.

Tom states "I'm very excited about joining the Michigan State University Extension team and I am looking forward to meeting and working with individuals involved in the swine industry, as well as other members of the agricultural community."

If you have not had the opportunity to meet Tom, please stop by the MSU Extension – Jackson County office and welcome him to Michigan as our new Regional Swine Extension Agent.