

# Computers Another Tool In Fine-Tuning Poultry House Operations

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**MANHEIM (Lancaster Co.)** — Poultry house computers won't fix watering systems, replace torn belts, or care for sick chickens.

But as a tool, they can be used successfully to make the minor, labor-saving adjustments to the house environment to provide a "better bottom line because of better bird comfort," according to David Graybill, broiler flock supervisor, Pennfield Corporation.

Graybill spoke on Monday to about 30 poultry producers and industry representatives at the Penn State-sponsored Poultry Management and Health Seminar at Kreider's Restaurant.

For the past five years, Pennfield has been using computerized house environmental controllers in the company's broiler operations. If installed and programmed correctly, according to Graybill, computers can be a vital resource in managing time and improving growout efficiency.

Graybill asked those attending if they made use of a computer today. While many own and operate a computer of some sort, either a PC or a laptop, many indicated they hadn't used one that day.

Graybill showed them a digital watch, which makes use of computer technology. Automobiles and other equipment that contain electronic components make extensive use of computer "chips" just like the desktop PC.

"I think we've all put our trust in computers," he said. "We are inundated with computers, and we need to be aware of that. We trust them. Why wouldn't you trust them in the broiler house?"

Graybill noted that certain farm industries, including poultry companies, are reluctant to use computers because of the lack of know-

ledge and confidence about their abilities.

"Here in the broiler industry, it seems like we haven't picked up using computers as quickly as the swine industry. I hear of swine houses that are highly computerized."

Pennfield makes use of a variety of computerized controllers to monitor and adjust house temperature and other factors related to environmental quality. Graybill examined the features on many of them that do a highly accurate job of fine-tuning factors such as temperature and humidity. Also, computers can be used to time fans, adjust lighting, and control curtains.

"The dependability part of the computer is something that we can never overlook, because it's there and is available 24 hours a day," said Graybill.

Customizing the computer controls is vital. The controllers must fit into the particulars of the operation.

"The 'customizing' part is probably the one where we fall down the quickest, because it's the human side of the computer," he said.

When using computers, the following guidelines are essential for optimum effectiveness:

- Surge and lightning protection. Graybill indicated a service representative once told him that lightning causes most computer problems. "Lightning can knock computers out or severely hurt performance," said Graybill. Information on housing type and how prone the building is to lightning strike is critical when installing the systems. Installing surge and lightning protection is critical.

- Backup controls. When computerized, the house environmental control system is centralized. If

something detrimental occurs and the computers are down, make sure preparations are made to ensure the smooth operation of the facilities.

- Hard wiring. Nearly five years ago, while installing the first systems at Pennfield, Graybill discovered that "we were doing our hard-wiring in such a way that we locked two, and maybe three, fans into one output off of the computer." Graybill said, as a result, "if we wanted one of those fans to run, we had to unplug the other two. Any time you do that, you limit the efficiency of your system and you set yourself up for possible disaster." Each component should be wired so that there is a multitude of ways you can have the outputs go to components in the house and create the exact conditions you want at different sections of the house. Also, conduit wiring (all wires through a pipe) is generally more reliable than plastic-covered wire, because poultry house fires often start after rodents chew on wires.

- Maintenance. A reliable technician is needed to make sure that covers are installed on the electronic equipment. "Spiders and their cobwebs can do a number" on electronic equipment, according to Graybill. Using a "common-sense" approach to maintenance and keeping units tightly closed is important. Also, Pennfield recently upgraded all the batteries (which normally last 5-7 years) in one system, and also updated the software on the computer chip to ensure the efficient operation of the units.

- Training. "Training is important and probably one of the things that we fail to do the most often," said Graybill. Personnel must be trained and adequately retrained on a regular basis "to get the most



As a tool, computers can be used successfully to make minor, labor-saving adjustments to the house environment to provide a "better bottom line because of better bird comfort," according to David Graybill, broiler flock supervisor, Pennfield Corporation, right. Graybill discusses environmental controllers with Richard Landis, layer and pullet serviceman, Melhorn Sales Service and Trucking, Mount Joy.

out of the computer system."

- Technical support. Support is necessary at the end of the phone line or the technician nearby when operational problems occur.

Growers should realize that a computer is simply one of many

tools that are available to make the work more efficient. However, they can't do everything.

"I find that growers are going to spend the amount of time in there that they have to spend, whether they have computerized controls or not," he said.

## FFA Presents Awards

(Continued from Page A1)

rset County, western region vice president; Marjorie Erway, Coudersport, north central region vice president; Mark Heeter, Central High School in Blair County; south central region vice president; Tonya Anthony, Marion Center Area High School in Indiana County, treasurer; Jennifer Grimes, Tulpehocken High School in Berks County, secretary; Lloyd Bier, Big Spring High School in Cumberland County, state sentinel; D. Joshua Troxell, state reporter, and Shannon Horst, chaplain, both of Garden Spot High School in Lancaster County.

Dwight Woelkers said that in his four years as Foundation presi-

dent, he learned that FFA is one of the greatest opportunities for young people. He presented a check for \$63,117 compiled from businesses, chapters, and individuals across the state who offer financial support.

Keynote speaker at the Tuesday evening session was Travis Hagen, national FFA secretary from California. In a stirring message, Hagen challenged members to be effective in today's society by making things happen, by giving 100 percent effort, and by learning from experiences.

Members competed in numerous judging, speaking, and skill events throughout the annual convention.



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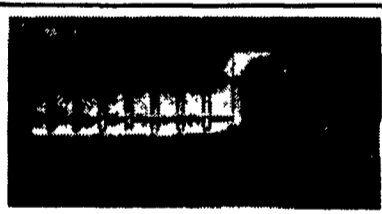
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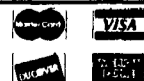
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