



Perfection's Style ET, the national senior champion female, was selected as the grand champion female of the 20th National Charolais Show. The 1986 daughter of Roxy's Jack Dempsey 63R and BR-MF Lady Tyger, Perfection's Style is owned by Grassy Forks Farm of Catawba, N.C.

bull was Diamond "M" Juice 790W, a March 10, 1987, son of ABC Iceman 811 and Diamond M Miss 901 owned by Granada Charolais: Silver Creek Farms of Blue Mounds, Wis.; and Diamond "M" Farms of Estevan, Saskatchewan, Can. WC Jobber 7046 was named national reserve junior champion. He is a March 2, 1987, son of Lochmoor Sterling 1S and WC Mrs Palmer 4041 owned by Wesson Charolais Inc. and Thomas Charolais Inc. of Raymondville, Texas. The national reserve senior champion was Mr. Dempseys Rocket 116, a 1986 son of Roxy's Jack Dempsey 63R and Cardinals Talia R773 owned by Willard Walker and Grassy Forks Farm.

In national group competition, Airhart Cattle Co. won every division.

## Computer Aids In Poultry Management Instruction

BY CLAIRE MC CABE  
University of Delaware

NEWARK, De. — The University of Delaware Agricultural Experiment Station's broiler house has been computerized, thanks to the generosity of the agricultural industry and the foresight of Dan Palmer, Extension poultry specialist, and Bob Alphin, Agricultural Experiment Station poultry farm manager.

The two men teach a department of animal science poultry production course to undergraduates. Palmer presents theory in a lecture format, while Alphin directs the laboratory section. In the lab, Alphin says the students

actually grow a flock of 2,000 broilers for processing. And this is where the updated broiler house comes in — the computer will help the class keep a close monitor on environmental factors that can affect the chicken's health.

The College of Agricultural Sciences department of animal science maintains a broiler house on the experiment station farm in Newark for teaching and research purposes. A history of generosity surrounds the facility. The house was constructed in the early 1980s with partial funding provided by the Merck Company. This past year the facility has been updated through numerous pieces of equipment donated or offered at reduced prices by several companies.

"Dan and I wanted to update and modernize the chicken house," said Alphin. "It's important to have students use up-to-date equipment. We were working with eight-year-old equipment and our goal was to modernize and use what's being used in the industry."

"In the course, the class becomes, in effect, a contract grower for local industry," Alphin continued. "We send the flock out to be processed and use a different company every two years. We provide housing, labor and equipment to raise the chickens. The company provides the chicks and feed. It generally takes six to seven weeks to grow out the flock, so it fits well within a semester's work."

"No money exchanges hands," he explained. "We do it for educational purposes. The class learns how to set up a house and care for the broilers. The students get hands-on, practical experience."

The teaching team got lucky, and the modernization they planned for went one step further. They are using a computer that is not yet widespread in the industry, but may very well be adopted if it proves practical. Alphin says that computer-monitored broiler houses have stirred a lot of interest among poultry farmers, but few growers have them.

"Pal-Tech, a division of the Willmar Poultry Co., designed a computerized monitor and control system for turkeys," said Palmer, "but it can be adapted for other poultry."

Pal-Tech donated the use of their computers, including both a zone unit and a barn system, to the College of Agricultural Sciences. In turn, the college will provide feedback on how the equipment works in broiler house conditions.

"The zone computer can be thought of as a fancy thermostat," explained Alphin. "It regulates heat, humidity and ventilation. It also monitors the average weight of the broilers on a sliding scale and can be connected to an alarm system to signal critical changes in temperature. With the use of an ammonia sensor, it can monitor the ammonia level, too. Ipec, Inc., has donated the use of an ammonia-monitoring device to the college."

But, Alphin stressed, "It doesn't eliminate the need for a person to go into the broiler house."

The barn computer has the capacity to be connected to 40 zone computers. "This can allow a poultry farmer to identify a problem without having to physically walk through every house to find it."

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