Lancaster Pony Club

Lancaster Pony Club members recently participated in a one-day rally hosted by the Middletown Pony Club in Middletown, Del.

The local D-1 team consisted of Tony Gibson, Drumore; Maureen Little, Camargo; George Young, Atglen; Jerry Jackson, Honeybrook, and Sharon Vasce as Stable Manager. They won first in the competition of Dressage, Cross Country, Stadium Jumping, Written Test and Stable Management.

Howard Fair, Unionville, has been invited to instruct the club on Sept. 15th.

Batch Pasteurization System For Small-Volume Liquid Egg Producers

A "mini" pasteurizer and process has been developed for small-volume producers in the liquid egg industry.

The new system, an ARS-University of California cooperative effort, costs less than $12,000.

Over 66 billion individual shell eggs are produced in the United States each year. Most are destined for table use, but many don't make it, particularly those that are too small, cracked, thin-shelled, or of low interior quality. These eggs, slightly over 14 percent of the total produced, are marketed as liquid egg products for commercial users such as bakeries and noodle and mayonnaise manufacturers. Under the USDA voluntary egg products inspection program, all egg products must be pasteurized and several States require that egg products be free of **Salmonella** bacteria. The most popular **Salmonella** treatment is pasteurization.

Until this year, only HTST (High-Temperature Short-Time) type pasteurization developed by the USDA was used. Equipment available was designed for operations involving several hundred gallons or more of liquid egg per hour, and required more than $25,000 in capital investment.

Small-volume producers, concerned with only a few hundred gallons or less a day, account for about 2 percent of the liquid egg product industry's output. They could neither use HTST efficiently, nor could that justify the large investment. Although some of them relied upon large plants for pasteurization, many weren't located close enough to warrant transporting their liquid eggs for treatment.

This segment of the industry needed a batch (small volume) process that reduced bacteria as effectively as HTST, and which caused minimal damage to the functional properties of liquid eggs. The process would also have to be adaptable, both in cost and capacity, to the requirements of small volume producers.

The researchers tested four pasteurizers: one laboratory-built and three commercial units. The laboratory-built unit consisted of a 3-gallon stainless steel bucket surrounded by a water bath that could be heated and cooled at a wide range of temperatures and time periods. An electrically-driven impeller for agitation was mounted on the cover.

The second unit was a 50-gallon kettle with side-wall heating and cooling and swept-wall agitation. The third was a 130-gallon kettle with side- and bottom-wall heating and cooling and impeller agitation. The fourth was a 100-gallon horizontal kettle with rotary coil heating and cooling. Both the 130- and 100-gallon units were modified to include head-space heaters to assure pasteurization of surface foam.

The batches of liquid whole egg were inoculated with **Salmonella typhimurium.** Samples were drawn for functional property tests and **Salmonella** kill rates at various intervals during heating, holding, and cooling.

Each of the commercially-available pasteurizers, after minor modifications, produced satisfactory results. A major factor in the process is the proper application of time and temperatures. Researchers concluded that a batch process utilizing a heating time of about 30 minutes and a hold time of 10 minutes at 135 degrees F. for liquid whole egg controlled Salmonella as adequately as the time and temperatures specified for HTST processes.

Ag Inspectors Start School

School started this week for 28 prospective meat inspectors of the Pennsylvania Department of Agriculture.

They constitute the first men recruited to implement the state's new mandatory meat inspection law which requires inspection of meat and livestock before and after slaughter and for inspection of slaughter plants and packing houses.

The future meat inspectors are being trained by representatives of State and Federal Departments of Agriculture, and by staff members of the College of Agriculture of The Pennsylvania State University. Sessions are being held at Penn State, where technical and laboratory facilities are available.

When class work is finished September 17, the group will receive six to nine months of on-the-job training in federally inspected plants where they will observe all phases of slaughtering and processing.

"Their most important assignment will be to learn to recognize the normal and the abnormal," said Dr. John C. Shook, director of the State Agriculture Department's Bureau of Animal Industry.

Additional classes will be trained until full complement of 140 inspectors are at work.

Old Reliable

"Let them eat grass" said the old French aristocracy when told their people were starving. They did not realize just how apt their words would be until dairy products became the byword of the world.

The dairy cow is the best way to market grass. She is the most efficient converter of cellulose to human food that man knows. Furthermore, she doesn't limit her ability to grass alone.

As an example of the versatility of the dairy cow to produce human food, scientists at Penn State University fed cows newspapers and urea. The cows may have shaken their heads a bit at the silliness of man but they ate and went right on producing human food — milk.

Humans cannot eat grass, newspapers or corn cobs. Cows can — and still produce a high quality human food. It will be in this way we will be able to enjoy a rich animal-food-products diet. The old cow has been the "foster mother to the human race" for many centuries and it looks like she will continue to do so despite the population explosion.

Homeowners spend about $750 on home remodeling, to every $1,000 spent on new home construction.