


Poultry Science Capital Region Veterinary Science

Penn State

Poultry Pointers

Entomology Food Science



Agricultural & Biological Engineering Agricultural Economics

COMPARISONS BETWEEN DIFFERENT METHODS OF INDUCED MOLTING AND THEIR INFLUENCE ON THE SECOND CYCLE PERFORMANCES

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Induced molting is a common management practice in the egg industry.

There are different reasons behind making the decision to induce molting, one of which is to improve egg quality. Economic considerations such as the anticipation of high egg prices is defi-

nately another important reason to induce molting.

There are different methods that are used to artificially induce molting; however, all are aimed at giving the flock a rest at the end of a period of egg production so that it may perform more efficiently during a second cycle.

The most common procedure, which is called "conventional," provides no food or water for two days and is followed by providing water and 45 grams of feed/hen every other day for a period of one week.

Oyster shell is provided on a continuous basis throughout the nine days. From days 10-60, water is provided continuously and each hen receives 90 grams of feed. During the 60-day period, the light received is reduced from 16 to 8 hours/day. Following the 60 days, the hens are put back on full-feed layer ration and light received is

back to 16 hours/day.

Another method used to induce molting is called "California" and incorporates a longer period of complete feed withdrawal (10 days) followed by nothing but cracked corn for 18 days. Water and oyster shell are provided for the total 28 days. As in the conventional method, in the California program, light is reduced from 16 to 8 hours/day throughout the 28-day period. Following the 28-day period, the hens receive 16 hours of light and are put back on full-feed layer ration.

The third method to induce molting is to use zinc at 20,000 ppm for 5 days and then back on full-feed layer ration.

In our laboratory, we conducted an experiment to study the difference in the effects of the above mentioned methods of induced molting on subsequent performance and on the immune response. White Leghorn hens were used following 12 months of production. Hens were divided randomly into four groups and the three methods of induced molting were applied to the first three groups. The fourth group was not treated and served as control. Body weights, egg production, egg quality, and immune responses were

measured at different time periods. We found that relative to control hens, body weights of hens in the California program were reduced the most and hens in the conventional group were reduced the least during the treatment periods. At peak egg production, body weight of hens in all groups were similar. Egg production and interior egg quality were better in the conven-

tional group than in the other three groups.

However, eggshell weight was higher in the California group than in the other three groups. In conclusion, it seems that general performance of hens in the conventional group is better than the other induced molting groups. Data on the immune responses will be reported at a later date.

Nutrient Management Exam Set

ANNAPOLIS, Md. — Maryland Department of Agriculture Secretary Robert L. Walker announced that the first Nutrient Management Certification Examination for 1994 is scheduled for Thursday, March 10 at MDA's headquarters building in Annapolis.

The exam is open to qualified individuals from both the private and public sector who provide farmers with state-approved nutrient management recommendations, or professionals who provide technical assistance or develop plans for waste management systems

and utilization of organic wastes.

Interested persons should submit a completed application along with a \$50 fee to MDA by February 25. (Personnel from government agencies are exempted from the \$50 payment requirement.) Additional information and application forms may be obtained by calling the Maryland Nutrient Management Program at (410) 841-5863. A list of recommended study materials will be supplied to all qualifying applicants.

For more information on Maryland's Nutrient Management Program, call (410) 841-5863.



LANCASTER COUNTY POULTRY ASSOCIATION
Affiliated With
Pennsylvania State Poultry Federation

ATTENTION

POULTRY PRODUCERS

1994 Lancaster County Poultry Progress Day

Thursday, March 3, 8:30 am - 3:30 pm

Farm and Home Center, Lancaster, PA 1383 Arcadia Road Lancaster

Sponsored By

PENN STATE Cooperative Extension & Lancaster County Poultry Assoc.

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| 8:30 am Coffee and Donuts and Visit Exhibits | 1:30 pm How Insurance Companies View Farming — Gregory R. Kirkham, Old Guard Mutual Insurance Co. |
| 9:30 am What I Saw Interesting at Southeastern - Slide Tour of the Poultry Show — Dr. Paul Patterson, Penn State Poultry Science Department | 2:15 pm Improving Bird Performance Through Ventilation — Gary Gladys, Pennfield Corp. |
| 10:00 am Poultry Production in Russia — Dr. Richard Peacock, Pennfield | 2:45 pm How To Control L.T. Through Vaccinations - Dr. Patty Dunn, Penn State Veterinary Science Dept. Through Biosecurity - Zoann Parker, Penn State Cooperative Extension |
| 10:30 am Effect of NAFTA and GATT on the Poultry Industry — Dr. Milt Maddison, USDA | 3:15 pm Pennsylvania Egg Quality Assurance Program Update — Dr. David Kradel, Pennsylvania Poultry Federation |
| 11:00 am Nutrient Management Regulations Affect on Poultry Farmers — Ron Meck, Egg Producer & Member, Nutrient Management Advisory Committee | 3:30 pm Adjourn |
| 11:30 am Influence of Infectious Bursa Disease (IBD) on Profits — Dr. Gwen Franz, Intervet | |

Lunch and visit Exhibits - Lunch Tickets available until 11:00 am for \$6.00

For more information call John Schwartz, County Extension Director (717) 394-6851

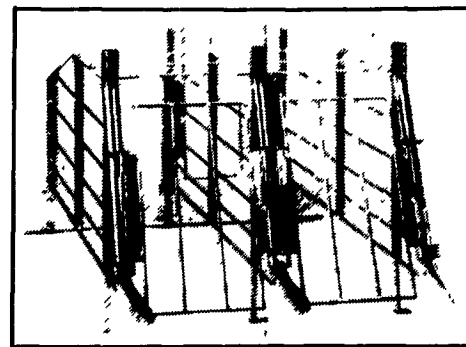
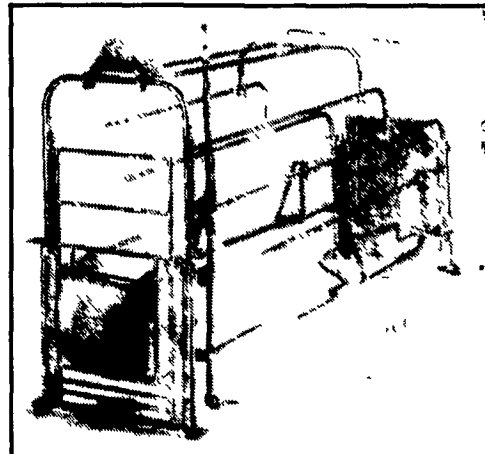
LUNCH TICKETS \$6⁰⁰ — BRING THIS AD AND SAVE \$1⁰⁰

To control the spread of disease we request all poultry people to shower and wear clean clothes and foot wear to the meeting. We also recommend as soon as you arrive home you shower and change clothes and foot wear before tending your birds.

TRI-COUNTY HOG EQUIPMENT \$ VALUE LEADER \$

PIG SAVER "DUTCH CRATE"

Developed through testing in our research farms the goal was to develop a crate that nearly eliminates crushing, due to lay one, unmatched durability and be easy to work around. All this has been achieved by a unique gravity fill-rail that forces sows to lie down slowly and using stainless steel for rear doors and legs, proven horizontal and solid steel rod construction. All this at a reasonable cost. Crate also can be installed on an angle.

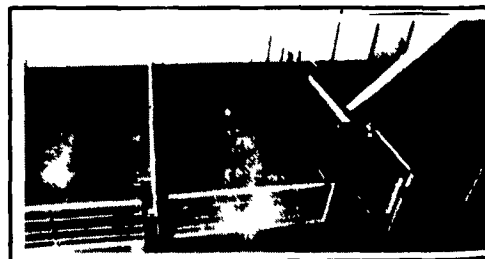


CONFINEMENT STALL

Developed recently in our R&D farm. Our goals were convenience, safety and durability. The low back and flat top rails are easy to reach over with no sharp edges. Stainless steel rear legs and front feet along with solid steel horizontal rods through punched uprights provide the strongest, most durable stall ever produced by Tri-County (21"-24" O.C. x 86")

NURSERY PENNING

Nursery penning has been improved by the use of an optional solid stainless steel panel on the front gates which keeps walkways clean. Stainless steel verticals on penning eliminates corrosion where penning attaches to the floor. Stainless steel drinker pipes & mounting brackets also increase durability.



FINISHING PENNING

Optional stainless steel verticals and fasteners offer improved durability over other similar types of penning. Loop and flapper latch arrangement eliminates the use of drop pins. Stainless steel fence line feeders provide excellent durability and a minimal amount of waste.

TRI-COUNTY
Confinement Systems, Inc.
705 E. Main St. Bld. 1, Lebanon, Pa.
(717) 274-3488

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