



Poultry Patter

AGRICULTURAL EXTENSION SERVICE • INSTITUTE OF AGRICULTURE
UNIVERSITY OF MINNESOTA

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INTRODUCTION TO POULTRY PATTTER.

This is the first issue of Poultry Patter, a bimonthly newsletter prepared by your poultry extension specialist and the staff of the Poultry Science Department of the University.

Our aim is to provide you with useful, practical information so that you might keep abreast of the many changes occurring in this fast-moving egg production industry. We invite your suggestions for making Poultry Patter "bigger and better" and more helpful to you.

WET LITTER - A WINTER MANAGEMENT PROBLEM

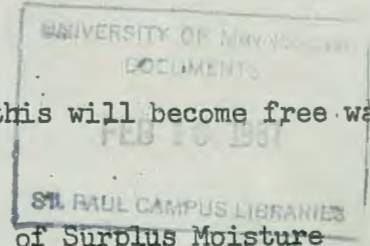
D. C. Snetsinger
Assistant professor, poultry science

Cold winter weather causing cooler laying house temperatures brings about an annual problem of wet litter. High moisture in the house plagues the producer with lowered production due to the general stress, and increases the spread of respiratory diseases. In addition, more dirty eggs, intolerable ammonia odors, and excessive condensation on the walls occurs.

This condition is unnecessary. With a little insight into the actual cause of the problem and a few management tips, we can find a solution.

First, let's examine the sources of moisture in a poultry house. Small amounts come from vaporization of water from hens' lungs and from spillage and evaporation at the waterers. However, the primary source is from the droppings. One hundred high producing hens will excrete 4 to 5 gallons of water daily.

About half of this will become free water in the air.



Disposing of Surplus Moisture

Frequent removal of the droppings will greatly reduce moisture problems. Pit cleaners have been installed in a few commercial houses to remove droppings twice a week. This reduces the moisture and may be a justification for pit cleaners. However, pit cleaners are costly and troublesome in cold weather if the manure has to be spread on the field.

A more practical solution is to properly ventilate the house. As henhouse temperatures drop, most operators have the tendency to close up their houses. This is a poor practice, since the best way to keep moisture from accumulating in the house is to bring in fresh dry air. As air enters the house, it will be warmed and its capacity for holding moisture will be increased. There is roughly a 5 percent increase in the moisture-holding capacity of air for each 1° rise in temperature. Thus air warmed from 15° to 55° can hold considerably more moisture at the higher temperature.

The simple solution to the moisture problem is solely one of ventilation; however, bringing in much outside air will lower the house temperature. If it is lowered too drastically (below 50° F), the effectiveness of the increased air movement drops as does the efficiency of feed utilization. Eventually egg production will also decline.

The problem of ventilation is then one of being able to move enough air through the house to remove the moisture and at the same time keep the house

temperature from falling too low. If your house has adequate insulation, sufficient air can be moved out to remove the moisture. However, if the temperature in your house falls below 50° F. with proper ventilation, you must either add supplementary heat or more insulation.

Addition of 1/4 to 1/2 pound hydrated lime per 4 square feet of floor space and stirring the litter are recommended as temporary aids until adequate ventilation is available.

NEW TURKEY BUILDING

The Poultry Science Department of the University of Minnesota has just completed a turkey experimental building on the St. Paul Campus. Funds for the building were donated by the Minnesota Turkey Growers Association. The building is equipped to control temperature, humidity, and ventilation in each of eight pens.

PENB

The Minnesota Poultry Industry Council has taken over the supervision of State Poultry and Egg National Board (PENB) funds. Gus Heinze, Executive Secretary of the Minnesota Poultry, Butter and Egg Association, is in charge of collections. Please send your PENB contributions to Gus Heinze, 412 Gorham Building, Minneapolis 3, Minnesota.

NEW POULTRY PRODUCTS LABORATORY

An expanded program in poultry products research at the University is anticipated following recent completion of a new laboratory in Peters Hall. This facility is possible largely through support of Clarence Wendt, Sleepy Eye, 1962 Ford Farm Efficiency Winner in Egg Production. Wendt stipulated that his \$2000 award be used for the laboratory.

NATIONAL EGG COOKING CONTEST

A National Egg Cooking Contest conducted by the Poultry and Egg National Board, opened January 1, closes February 15. Entrants submit on an official entry blank their egg recipe using one egg per serving. Entry blanks are available from extension offices, hatcheries, egg buyers, and grocery stores.

Minnesota senior and junior division winners receive expense-paid trips to Chicago to compete in the national contest. Cash and merchandise prizes also are offered.

Our mailing list on this first issue is very incomplete. We are asking your help. Please send the names of any egg producers in your area that you think would be interested in reading our news letter to: Robert W. Berg, extension poultry specialist, Institute of Agriculture, St. Paul 1, Minnesota.



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IN THIS ISSUE...Wet Litter -
A Winter Management Problem

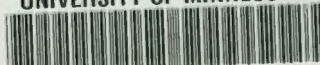
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SKULI RUTFORD, Director
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