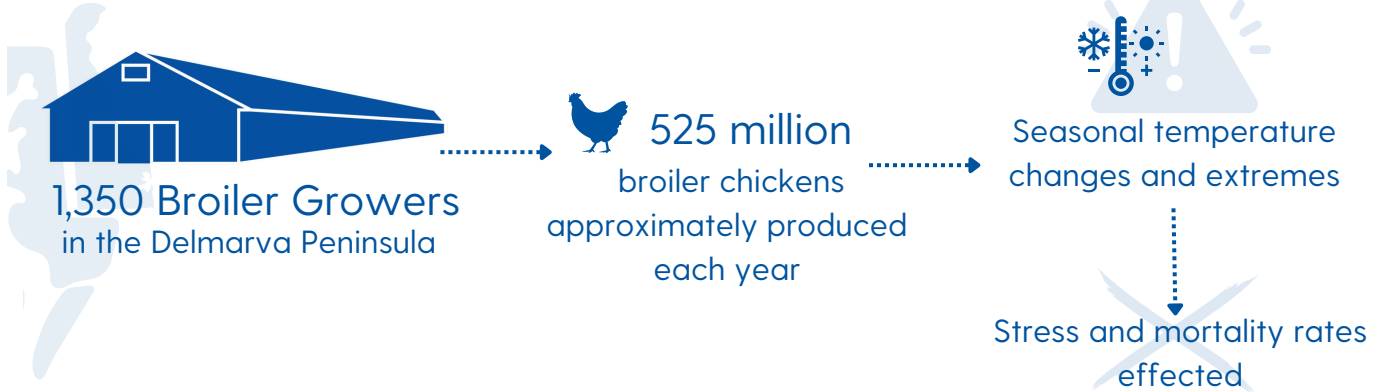


Preparing Poultry Growers for Seasonal Extremes in Delmarva Peninsula



UNIVERSITY OF DELAWARE
COOPERATIVE
EXTENSION

RELEVANCE



RESPONSE



The University of Delaware's Poultry and Nutrient Management Extension teamed up to host programs for poultry growers.



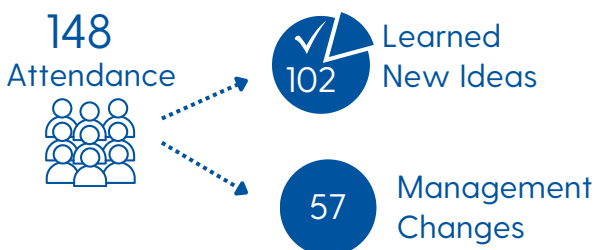
4 Programs were offered to poultry growers

- Poultry House Management for Extreme Heat (Spring)
- Getting Your House Ready for Hot Weather (Spring)
- Managing Conditions to Minimize Mortalities in Cool Weather (Offered 2x in Fall)



When moisture and humidity levels are not properly managed, this compromises the immune system of the bird, resulting in poor performance and possibly mortality.

RESULTS



A grower's willingness to implement these strategies creates a more comfortable environment for the chickens, minimizing stress and reducing mortality.

Profitability increases



RELEVANCE

The Delmarva Peninsula is home to 1,350 broiler growers that produce approximately 525 million broiler chickens each year. Poultry growers are challenged to manage bird comfort during seasonal temperature changes and extremes. Understanding how to minimize the impact of extreme temperatures reduces the stress level on the birds. Birds that are raised in a consistent environment that minimizes stress will have better health, better livability, better utilization of feed and water, increase the grower's profitability and reduce the amount of nutrients that must be composted due to mortality.

RESPONSE

The University of Delaware's Poultry and Nutrient Management Extension teamed up to host programs for poultry growers. Four programs were offered to poultry growers, focusing on increasing growers' knowledge of how certain stressors impact the bird, building a deeper understanding of ventilation principles, and management techniques for temperature changes and weather extremes.

The programs "Poultry House Management for Extreme Heat" and "Getting Your House Ready for Hot Weather" were offered in the spring of 2023 in Kent and Sussex County, Delaware. The programs raised growers' awareness of how we are experiencing hotter temperatures for longer periods of time and how this can impact the birds. It also addressed techniques to reduce stress and the risk of losing birds due to these extreme temperatures, building the growers' knowledge of what steps can be taken to prevent mortality and improve resource utilization. Two programs were offered in the fall, focusing on the importance of ventilation in the poultry house to minimize stress. The program "Managing Conditions to Minimize Mortalities in Cool Weather," shows growers what exposing birds to temperature swings and increased ammonia levels will do to a bird. Information was shared to help growers better understand how mortality increases when moisture and humidity levels are not properly managed and how this compromises the immune system of the bird, resulting in poor performance and possibly mortality.

RESULTS

There were 148 poultry growers who attended the seasonal programs. When surveyed, 102 poultry growers indicated they felt they had learned a lot, and 22 indicated they had learned a little. When asked if they would change their management, 57 indicated they would. Fifty-two of the respondents said they were already implementing strategies to minimize mortality. A grower's willingness to implement these strategies creates a more comfortable environment for the chickens, minimizing stress and reducing mortality. The reduction of mortality reduces the amount of nutrients that must be composted. This results in less nutrients that must be land applied. The decrease in mortality reduces stress on the grower and improves their profitability. One of the attendees commented that he "wished he had this training 40 years ago...it would have saved time, stress, birds, money and arguments with his wife over how to manage the house conditions."

RECOGNITION

Commercial Poultry Growers, Delaware Nutrient Management Commission, Delaware Department of Agriculture, Delmarva Chicken Association

PUBLIC VALUE STATEMENT

Improving poultry growers' knowledge of ventilation techniques to minimize stress during weather changes:

- Increases the availability of an affordable protein source for consumers.
- Minimizes stress on the birds, shows more humane ways to grow them and provides them with the best environment possible.
- Improves the efficiency of feed and water so that it is not wasted due to mortality.
- Reduces the amount of mortality to be composted and spread as nutrients.
- Increases the profitability and sustainability of the grower.

This information is brought to you by the University of Delaware Cooperative Extension, a service of the UD College of Agriculture and Natural Resources – a land-grant institution. This institution is an equal opportunity provider. Learn more at www.udel.edu/extension.