

TECHNICAL SERVICE



BULLETIN



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AQUA DEE PUTS POULTRY FLOCK BACK ON TRACK

One of our longtime customers started a flock of toms on Dawe's **DQ TURKEY** program, and the results through 14 weeks of age were up to his normal high standards. For example, mortality was just 0.32%/week from Week 9 through Week 14. But at that point, the producer began to notice birds going down on their legs. Mortality increased to 0.75%/week, unusually high for him.

Dawe's staff was called in to help investigate. During the post mortem exam, we observed large blood clots in the thigh muscle, a result of fractures of the femur bone. Further examination revealed no developmental abnormalities on the head of the femur, and the joints appeared to be well formed.

The grower took several precautionary steps: He reduced employee foot traffic in the buildings to limit stressful activity and fighting among the birds. He decreased artificial lighting from 14 to 8.5 hours per day. At the same time, the mean building temperature was raised from 55 to 65 degrees Fahrenheit in an attempt to improve feed conversion. None of these steps reduced mortality.

On the fifth day after the problem was discovered, the feed was reformulated with higher levels of calcium and phosphorus. When mortality still had not peaked by the eighth day, the grower began to add **AQUA DEE**[®] (Dawe's water-miscible source of Vitamin D₃) to the drinking water, at two times the usual dose.

Within three days of providing **AQUA DEE**, bird mortality had declined from 0.13% to 0.049% per day. After five days of **AQUA DEE** treatment, the lighting was reset at 14 hours per day and the mean temperature was reduced to 50 degrees Fahrenheit. Average daily feed intake increased from 1.25 lb to 1.75 lb. Fifteen days after mortality was reduced (at 137 days of age), the flock went to market at an average weight of 43.09 lb, 1.47 lb above the standard for that age. Livability was 86.43%. The final feed conversion for the flock was 2.67, better than the 2.86 standard for birds of that size.

The reduced mortality over the last 15 days meant 96 additional toms marketed, and \$2463.78 more revenue. After subtracting the cost to feed those 96 birds, there remained \$2126.10 in extra gross profit from the flock. The **AQUA DEE** treatment cost \$102.60. That's a Benefit-to-Cost ratio of better than 20:1.

For more details on the economic values presented above, please call our Technical Service staff at 1-800-323-4317. This Bulletin may not be reproduced without the approval of Dawe's Laboratories. Reprints are available upon request.