

Artificial Light for Turkey Breeding Hens

A Review—by Jesse E. Parker¹

Recently there have appeared two scientific papers that should be of interest to persons maintaining turkey breeding flocks in North Dakota. Results at the Oklahoma Agricultural Experiment Station (1) indicate that gasoline lanterns or natural gas lights (mantle type) were as effective in stimulating early egg production as electric lights. However, for two successive years young Bronze hens lighted with kerosene lanterns showed no response. The mean date of first egg, egg production to April 1, and percentage production differed little from the record of hens similarly housed and fed but not exposed to lights. In these trials all-night lights were used in all pens. Nothing in the experiments reported gave a clue as to the reason for the failure of kerosene lights to stimulate egg production in turkey hens except it was observed that the kerosene lights were not as bright as the other lights.

Results of experiments in California (2) indicate that turkey hens are sensitive to the amount of artificial illumination to which they are exposed. This work showed that a minimum of 2 foot-candles of light was necessary to stimulate early egg laying. Turkey hens exposed to this amount started laying earlier and laid about 20 eggs more than hens exposed to one foot-candle of light. To provide the necessary 2 foot-candles of light it is recommended that a 100 watt bulb suspended about 8 feet above the floor be used for an area 18x18 feet.

Although all-night lights and lights that come on in the mornings and evenings give satisfactory results, probably the use of

morning lights only is most satisfactory for most folks. Artificial lights may be used from 4:00 A.M. until daylight, and should be started about a month before egg production is desired. If artificial lighting is commenced January 1, some of the hens will commence laying about the first of February, and by the middle of February the bulk of the flock should be laying.

References

1. Milby, T.T. and R. B. Thompson, 1945. Sources of Artificial light for turkey breeding females. *Poultry Science*, Vol. 24, pp. 438-441.
2. Asmundson, V. S., 1945. How much light? *Turkey World*, Vol. 20, pp. 16-17.