REARING PULLETS FREE RANGE: HEALTH AND WELFARE IMPLICATIONS

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The experience of brooding and rearing pullets in free range conditions at the University of Queensland, Gatton is described with the aim to emphasise the importance of good management during these critical periods which assures that pullets succeed through the growing period and reach their genetic potential during the laying period. From day one to 16 weeks old, three Hy-Line Brown layer pullet flocks were brooded and reared free range for free-range egg-production. Guidelines for general brooding and rearing of chicks were available from the Australian Model Code of Practice for the Welfare of Animals (2002) and Hy-Line Brown Chick Management Guide (2002-2004). Brooding commenced in spring and birds were infra-red brooded and reared on non-treated pine litter. Prior to chick delivery the free range area was prepared (cleaned and disinfected), and modified with waters and feeders, with birds having access to nipple drinkers and a feed trough system from day one. Brooder rings were set up in the pens to confine the birds to a smaller space to make it easier for them to find feed and water and to maintain ambient temperature. Birds were maintained at a stocking density of 50 birds/m². Rings were removed when birds were 7 days old, consequently decreasing the stocking density indoors to 5 birds/m² and outdoors at 1500 birds per hectare. Infra-red heating was provided until birds were 3 wks old, thereafter sheds were naturally warmed and ventilated. Pullets were inspected three times every 24 hours during brooding, and twice every 24 hours during rearing. The lighting program was planned in conjunction with recommendations for open ventilation housing and changes in the natural day length. Fresh feed and water were provided daily. Pullets were fed a mash starter diet from day one to 8 weeks old and a pullet grower diet from 9 weeks to 16 weeks old. Birds were given access to the outdoor area from 4 weeks of age. Shaded areas were provided on the north and south side of the shed. Flock weights were established every two weeks and mortality were recorded daily.

The results showed that pullets grew consistently and reached an average body weight of 1376g at 16 weeks of age. The health and well-being of three flocks was consistent as demonstrated by low mortality rates. The average mortality (cumulative at the end of 16 weeks of age) was 2.4%, with a spread of 2.2%, 2.4% and 2.7% for each flock, respectively. Applying a program of vaccination suitable for pullets in free range assured that the bird’s immune system could respond appropriately to disease challenge i.e., mortality was minimized. There were few losses due to a postvaccinal reaction that occurred during a hot day (December). No losses from predators were recorded.

It was demonstrated that from week 1 to week 16 flocks showed a consistent trend of increasing body weights and a lower mortality than expected from the breeders standard. This experience showed that rearing chicks appropriately in a free range system (in the housing system into which they will be introduced before laying) can minimize losses and subsequently help reduce the stress of the movement to the laying range (house).


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