

BOOK REVIEW

Jutta Berk: Artgerechte Mastputenhaltung. Baulich-technische Ansätze zur Verbesserung der Haltungsumwelt (Natural-like Management Methods in Turkey Fattening. Contruction-technical Initiatives for the Improvement of the Keeping Environment). Kuratorium für Technik und Bauwesen in der Landwirtschaft e. V. (KTBL), Darmstadt, 2002. 81 pages, 24 black-and-white photographs, 32 figures, 22 tables. ISBN 3-7843-2150-X (Best.-Nr. 11412). Price: 18 €.

As there are no legal regulations of binding force concerning the keeping of turkeys either in Germany or in the European Union as a whole, on 2 September 1999 a voluntary agreement was concluded between the German provincial and federal poultry breeding associations and the different animal welfare organisations. That agreement laid down the management technological requirements to be used in the rearing of poultry for slaughter (stocking density, duration of natural and artificial lighting, etc.) also with regard to turkeys.

In recent years, turkey meat consumption has been increasing steadily in Germany: from 180 thousand tons in 1994 it rose to 325 thousand tons by 2001. About 60 percent of the consumption originates from domestic production, which has been conducted exclusively in conventional, industrial-type systems so far.

The demands of animal welfare organisations require changes in the breeding strategy, reduction of the stocking density (the number of turkeys kept on one farm and in one house), alterations of feed composition, and changes of the management conditions so that they are better adapted to the unique behavioural demands of the species. By these changes the both the health status and the general welfare of the birds could be improved. Because of the changing customer demands, the farmers are also becoming more and more interested in using new, alternative keeping methods.

After reviewing the origin and evolution of the turkey as a species, the author describes the different wild turkey varieties, the development of industrial turkey husbandry, the currently existing large breeding companies (B.U.T., Nicholas, Hybrid), and the hybrids marketed by them. Fourteen pages are devoted to describing the behavioural patterns and environmental demands of turkeys for fattening. She lists the pathological leg and skin changes caused by the artificial environment, and describes feather picking and cannibalism as vices developing as a consequence of overcrowding and keeping in a stimulus-deficient, dull environment. In the author's opinion, the management technology used so far should be improved by making the environment more diversified, e.g. by providing powder baths, perches, elevated platforms and outdoor runs for the birds. In

addition to increasing the performance (body mass gain, feed conversion ratio, breast meat ratio, meat quality), the breeding companies should pay more attention to improving the constitutional traits (skeletal and leg structure) and studying the correlations of genetic and environmental effects.

After the precise description of management technological methods currently used in the German turkey husbandry and fattening, a chapter of 33 pages is devoted to the presentation new, alternative keeping methods, together with the possibilities of transforming the current buildings into facilities enabling a natural way of keeping.

The currently existing turkey breeds suitable for fattening under alternative keeping conditions include Kelly (UK), Bronze Goubin and Black Goubin (France), which are varieties characterised by slow growth rate. The Big 6 hybrid layer of the BUT, with a slaughtering age of at least 140 days of age, could also be used.

In a 6-page chapter the book also discusses the calculated economic efficiency of turkey fattening under the new technologies. At the current German purchase price (1.15 €/kg liveweight), the profitability of turkey fattening in alternative management systems is lower in all respects (on a per bird basis, considering the total stocking capacity, per m² and on a whole-farm basis alike). Rearing in extensive, free-range system is even loss making. On the other hand, the use of such systems considerably improves the welfare of the birds and the attitude of society to turkey fattening, which is likely to become increasingly important in the future.

The illustrations usefully complement the text, and an 8-page reference list is available for those interested in the subject.

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