

IMPROVEMENT OF POULTRY FLOCKS*

The report of the Poultry Technical Committee of Great Britain, which has recently been referred to in the press here, deals comprehensively with the unsatisfactory position of the poultry industry in England, and outlines factors which have led to the high rate of mortality among flocks. The conclusions arrived at are in many respects in accord with the opinions expressed in these Notes from time to time as to the local trend of the industry, and, as the report is the result of many months of investigation into commercial poultry farming operations in Great Britain by a representative Committee, it is considered that it should be brought before those engaged in the industry here. Some space will therefore be devoted to the salient features of the report.

THOSE who have a knowledge of the industry cannot fail to be impressed with the analogy between conditions obtaining in Great Britain and this country, and every effort should be made to bring about an improvement before it is too late. Although the rate of mortality in our laying competitions has not reached the proportions that it has in the English tests, there is ample evidence of an increase in the incidence of disease and constitutional troubles on commercial farms, which are undoubtedly due, indirectly, to the lack of care in the production of stock and the conditions under which birds are kept.

RISE IN MORTALITY ON COMMERCIAL FARMS

In the first chapter of the report the position with regard to mortality is dealt with, and it is shown that in four leading egg-laying trials in Great Britain the mortality has steadily increased since 1930-1931, the figure being as high as 23 per cent. in one test, whereas from 1923 to 1929 the average was approximately 6 per cent.; while in some of the country trials there has been a similar increase, the figures quoted showing a rise from 6·8 per cent. in 1929-30 to 17·7 per cent. in 1936-37.

Surveys of a large number of commercial egg farms showed that mortality among adult stock was even greater, and the position was described as alarming.

HEALTH THE PRIMARY NECESSITY

One passage quotes a report of the Advisory Economist at the South Eastern Agricultural College, Wye, in which he states:—

“ If I were asked to say what was the most important thing to-day in successful poultry-keeping, I should answer, without any hesitation whatever, ‘ To maintain a healthy stock ’. I believe that if we could just stop thinking altogether for a few years about egg-yields per hen, and methods of housing, and mash compositions, and ‘ sexing ’ of day-olds, and concentrate our

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whole attention upon keeping the flock free from disease, the results would be nothing less than astonishing. Poultry-keepers are ready enough to spend money in trying out new methods of housing or 'new' kinds of mashes or other feeds, but no method of housing or of feeding, however efficient, will coax eggs from a sick hen."

This summing up aptly applies to the industry here.

CHIEF REASONS FOR INCREASED MORTALITY

A general survey of the position of the industry is given in Chapter 2, as follows :—

"To appreciate the reasons why mortality among poultry has become the serious menace to the industry indicated by the facts brought forward in the preceding chapter, it is necessary to consider the history of the industry in recent years. Briefly, the story is one of an expansion that has been too rapid : of a machine that is breaking down under the stimulus of its own momentum.

"Before the Great War, poultry-keeping was commonly spoken of as the Cinderella of agriculture. To-day it is the third most important of all agricultural branches, with an annual output amounting in value to some £30,000,000. In 1913, the total fowl population on holdings of one acre or over was about 33 million : to-day it is estimated to be nearly 60 million. The peak year was 1934, when the population numbered 69,358,900 ; *it had doubled in a decade*. In the mechanical industries, rapid and successful expansion is limited mainly by the availability of capital and the prospect of economic returns. In poultry-keeping, as in other livestock industries, the fundamental requisite is breeding stock. The rate of expansion of a healthy industry must be governed by the ability of the breeders to produce stock of sound quality. Unfortunately, in the case of the poultry industry the rate has gone far beyond this, and the position has been aggravated by other considerations to which we shall refer later.

SPREAD OF UNSOUND BREEDING METHODS

"Before proceeding to lay blame—as we are bound to do—on the spread of unsound breeding methods, and on other factors, including the operations of some large commercial hatcheries, as being mainly responsible for the present unhappy position of the industry, we would emphasize that we are not criticizing breeders and hatcheries in general. We recognize that the honest attempts of breeders to increase the productivity of their stock by selective breeding may, in a way which could not have been anticipated, have contributed to the present conditions. But, in addition, the constant demands for more and more stock, arising from circumstances entirely outside their control, induced them to have recourse to breeding methods which they would otherwise not have adopted. As to the hatcheries, although the policy of some was governed solely by the desire to make quick profits, and had no regard to the future welfare of the industry, there were others who used their best endeavours in the industry's interest, and attempted in many

ways, and at considerable expense, to ensure the good quality of the stock they were distributing. Further, since the experience of recent years has revealed the errors of the past, determined attempts are being made, both by breeders and hatcheries, to improve the situation: attempts made more difficult by the present economic position of the industry. Unfortunately, however, the influence of low-vitality stock is widespread, and the present troubles are deep-seated. We are fully satisfied that the industry cannot, by its own efforts, bring about within any reasonable period the radical improvement which is needed.

ILL EFFECTS OF RAPID EXPANSION

“ We revert, then, to the position of the industry in the years after the Great War. Egg prices were then at a high level, approaching twice what they are to-day. To large numbers of ex-Service men, anxious for an out-door occupation, poultry farming appeared an attractive proposition, and many with little or no previous experience set up farms. In some districts subsequent trade deterioration led to an influx of men from other industries, for only a relatively small amount of capital was required to start a poultry business. In fact, during the period in question the industry was sufficiently prosperous to attract a great body of recruits, many of whom had insufficient aptitude or experience, but who were yet able to make the business a paying proposition.

“ This influx led to a greatly increased demand for stock—hatching eggs, chicks, stock cockerels, &c.—which the comparatively few established breeders had difficulty in meeting. High prices could be commanded for breeding stock, and this had a two-fold result. On the one hand, men with little stock sense were attracted to invest in, and set up, large farms merely as a speculation, whilst on the other hand, keen but inexperienced commercial egg producers were tempted to become breeders. Subsequently the decline of prosperity in general agriculture in first one and then another of its branches led numerous general farmers to increase their poultry stock, and, in many cases, to specialize in this branch.

MASS PRODUCTION METHODS

“ The rapid expansion and demand for stock was an inducement to employ methods suitable to the accelerated production of stock of all descriptions. The mating of large flocks of pullets and hens for the production of hatching eggs became common; large incubators were used to produce day-old chicks, whilst firstly large intensive houses and later battery brooders were employed for rearing chicks in ever greater concentrations. Hatcheries which specialized in the supply of day-old chicks and growing stock were a natural outcome of these new methods and increased demand.

“ Breeders of little experience were able to obtain stock from those well established, demonstrate its value in laying trials, and by that means to provoke a demand for their own stock which they were both unfitted and unable to reproduce. The rapid development of hatcheries, and the fact

that this method of supply filled a great need in the growing poultry industry, led to a large sale in hatching eggs to hatcheries. Competition and commercialism led to price-cutting in hatchery chicks and a consequent reduction in the standard adopted and the class of egg bought by hatcheries. In some cases price alone has ruled the supply of eggs to hatcheries concerned only with profits, thus affecting the standards of both male and female stock used for breeding.

“ This situation has applied not only to commercial hatcheries but also to ‘ pedigree ’ breeders, whose stock has been in great demand, and many breeders of this class have mated immature pullets as a sideline for supplying commercial needs. We have also had evidence of the activities of dealers in both purchasing for resale bulk supplies of hatching eggs, the source of production of which was unknown, and in the purchase of surplus chicks from several sources or in open markets, which were subjected to adverse conditions before eventually finding a home. Such practices can clearly have only an adverse effect on the vitality of the stock so produced.

DANGER FROM AUCTION SALES

“ We consider, also, that auction sales have played an important part in the dissemination of inferior and diseased produce. We have received evidence that they are used as an outlet for reactors to the B. W. D. test, and for survivors of outbreaks of this and other diseases. The exposure of day-old chicks in auction markets has also been condemned. Day-old chicks may be exposed for hours before they are sold and, owing to draughts and the frequent opening of the boxes in which they are consigned, are liable to chill. Chicks are frequently offered at these marts in perfectly good faith by the auctioneer as ‘ mixed ’ or ‘ as hatched ’ when in reality they are sexed cockerels. The pens for the sale of adult or growing stock are often used as the dumping ground for the poultry farmer’s ‘ culls’.

“ Many dealings in poultry stock, moreover, are done solely through Press advertising. The claims made in advertisements, in relation to the price asked for the stock, point clearly to the need for protection of the buying public. Cases have been brought to our notice of men advertising as breeders, but having neither farm nor poultry of their own ; this applies to hatcheries also, the advertiser sometimes having no incubators or stock. We consider that an attempt should be made to secure the elimination of unscrupulous advertisements of this character.

TOO MUCH RELIANCE ON EGG RECORDS

“ We must also refer to the tendency that has arisen in past years to breed from hens of high egg yield, irrespective of their merits as breeding stock. The results of egg-laying trials, which record particulars of the egg production of individual birds during a period of 48 consecutive weeks, have not infrequently been abused. In these trials, identifying rings have been awarded to birds which have reached specified standards of egg production. No reference is made in the awards of the suitability of the birds as breeding stock, but nevertheless purchasers have been accustomed to regard such

hens as qualified breeding stock with an official record. Sometimes, also, a breeder who has had conspicuous success in a trial has been so inundated with orders for stock that he has succumbed to the temptation to mate up and sell immature stock or stock of an inferior class. To sum up, the desirable objective of high egg production and large egg size has been pressed with insufficient caution. There is no evidence that a fowl producing a high yield of large egg is necessarily a bad breeder, but the two qualities cannot be assumed to go hand in hand, and too little importance has been attached to the suitability of the high egg producer for breeding and particularly to its livability and to the capacity of its progeny to live.

“ Finally, it cannot be doubted that errors in management are a contributory cause of many outbreaks of disease. Over-crowding, in particular, has serious effects. The rapid expansion of the industry, to which we have already referred, undoubtedly contributed to overcrowding on many breeding farms, with unfortunate results on the quality of the stock.

“ We have summarized in the above paragraph the chief causes which in our opinion have led to the grave increase in mortality in the poultry stock of the country. It is a melancholy picture but we do not consider it overdrawn. Of recent years the position has been aggravated by the declining prosperity of the industry, which has served to increase the demand for cheap stock of all descriptions. Moreover, the fact that poultry multiply so much more rapidly than the larger classes of farm livestock, and can be so easily and frequently transported from district to district, has intensified the seriousness of all factors contributing to the production of diseased and inferior stock.”

RECOMMENDATIONS OF THE COMMITTEE

After dealing at length with various aspects of the position the Committee goes on to recommend the appointment of a Poultry (Stock Improvement) Commission for Great Britain, “ with the primary object of increasing the efficiency of the stock distributing industry,” and with statutory powers. In the event of such Commission being set up it is suggested that its operations should proceed along the following lines :—

“ (a) By order to announce that on and after an appointed day, and as soon as possible after the passing of the Act, every distributor of stock, hatching eggs or day-old chicks, subject to such exemptions as the Commission might allow, and every dealer therein, must register with the Commission and, in the case of hatcheries, must conform to conditions to be laid down.

(b) Registration would involve an undertaking to submit to inspection (surprise or arranged), from either the veterinary or husbandry standpoints, or both.

(c) It would be an offence to distribute stock, hatching eggs or day-old chicks from unregistered premises after the appointed day. In view of the fairly extensive opportunities for evasion, particularly in the earlier years of the scheme, the offence should be punishable by substantial penalties.

(d) The Commission would have power to suspend or revoke the registration of any distributor either on grounds of disease, or of manifest unsuitability of the stock for breeding purposes, or of obviously unhygienic conditions. We contemplate that the distributor would have the right to appeal against a decision taken under this power on the second or third of these grounds, and that as regards the first, he would have the right to appeal to the Minister against a decision taken on report of a practising veterinarian.

(e) Although we consider that no charge should be made for the first registration, we contemplate that the registration should be renewable annually and that for this a fee would be payable.

(f) The Commission would have power to confirm registration in such manner and at such time as was deemed expedient.

(g) Superimposed on the foundation of the compulsory scheme of registration, the Commission would be charged with the duty of introducing at the earliest practicable date a voluntary grading scheme, with higher standards, primarily designed to secure the production of high-quality breeding stock.

(h) The assistance recommended in paragraph 62 above would be applied by the Commission to the encouragement of this voluntary grading scheme.

(i) The Commission would draw up a scheme for the establishment of one or more progeny-testing stations, for the production of foundation breeding stock, to be supplied—when ultimately available—to graded breeders under the voluntary scheme.

(j) The commission would be empowered, subject to the approval of the Secretary of State for Scotland and Minister for Agriculture and Fisheries, to require the compulsory application of preventive measures in respect of any specified disease, if considered desirable in the interest of disease control.

(k) We further suggest that the Commission should be entitled to make representations to the Ministers if in its view the effectiveness of its powers were being impaired by the inadequacy of the conditions for the time being governing the control of importation of live poultry or hatching eggs into the country."

The report further proceeds to deal in detail with the operations of the scheme and quotes control measures adopted in other countries, &c. The report generally gives food for thought and should be regarded seriously by all who have the interests of the industry at heart.