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IMPROVED MARKET TYPE

IN POULTRY BREEDING STOCK



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NOTE: This bulletin has been prepared by a sub-committee of the Dominion Committee on Market Poultry composed of Mr. George Robertson, Assistant Dominion Poultry Husbandman, Central Experimental Farm, Ottawa, Prof. W. A. Maw, Assistant Professor and head of the Poultry Department, Macdonald College, Que., and Mr. W. A. Brown, Chief of Poultry Services, Live Stock Branch, Ottawa. The Committee gratefully acknowledges the assistance rendered in the conferences held this summer with Dominion and provincial officers in the different provinces in reference to the subject matter of this bulletin. Thanks are due also to Mr. W. A. Garland, of the Publicity and Extension Branch, Ottawa, for his work in preparing the illustrations.

Improved Market Type in Poultry Breeding Stock

FOREWORD

The need for improvement in the market qualities of poultry has been apparent for some time, and the subject matter of this bulletin represents the trend of development as a suggested guide to inspectors and flock owners.

While stress has been placed on body type, breeders should bear in mind that proper feeding and environmental conditions are necessary to ensure the finish and softness of flesh required in the higher grades of market poultry.

During the past year, in keeping with the announcement of the National Poultry Breeding Program in August, 1934, the factors set forth in this pamphlet have been included in the National Poultry Breeding Policies.

The recent adoption on the part of the provinces of Canada of the policy of approved flocks as sources of supply for eggs for hatcheries and general distribution, and the systematic selection of these flocks undertaken by the various inspectional staffs, affords a ready means whereby any plan of improved selection can be made quickly effective throughout the Dominion.

The premium in price which the larger markets have shown a willingness to pay for well-fleshed, properly finished poultry, offers a worth-while monetary incentive to producers generally to give special thought and consideration to improved market type in their breeding stock.

TENDENCY DURING RECENT YEARS

Up to 1910 poultry in Canada was bred as a dual purpose stock, that is, for the production of eggs and meat, no particularly intensive effort having been made to develop either feature.

The use of trap-nests became more general about 1910, and a serious effort was made to breed poultry for the maximum possible egg production. Many birds that otherwise would have been culled under the old system of breeding were thus used as breeders selected on the basis of egg production alone, and the general result in many cases has been deep-bodied, slab-sided birds with very prominent keel bones. The carcasses of such birds, no matter how they are finished for market, do not present a pleasing appearance although the actual amount of meat may be practically the same as is found on birds with more rounded breasts. Latterly, however, the examination of a large number of birds coming from strains with high egg records has shown that this type is not the only one that produces a large number of eggs. A reasonable number of birds with good records produce carcasses with a suitable market appearance, and furthermore, such birds are inclined to carry with them a degree of stamina and vigour not found in the less rugged type.

All poultry breeders know that in order to continue in heavy lay a flock of pullets must be in good condition. Not only must they show reasonable muscular or flesh development but there must be a fair degree of fat and a softness and pliability of flesh. In other words, good physical condition with plenty of fat in the tissues is one of the best indications of consistent and well-maintained egg production. On the other hand breeders who desire to maintain egg production at a high level are cautioned against swinging too far in the direction of meat type, the consensus of opinion being that there is a happy medium in type that can be effectively utilized to serve both purposes.

MEASURING MARKET QUALITIES

The following illustrations together with explanatory text set forth the market type of bird desired.

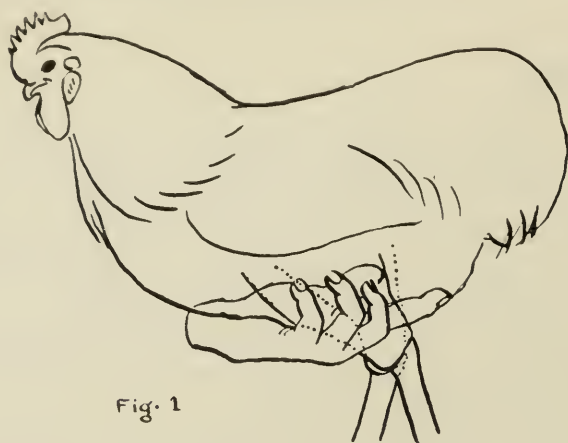


Fig. 1

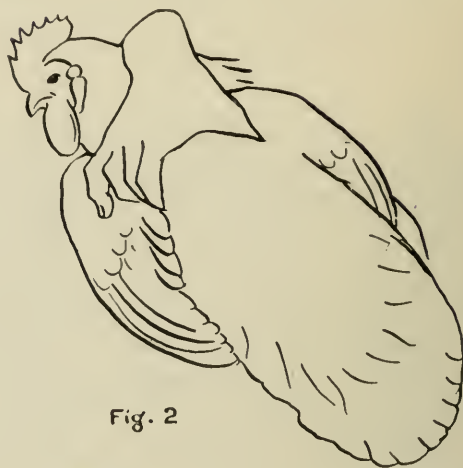


Fig. 2

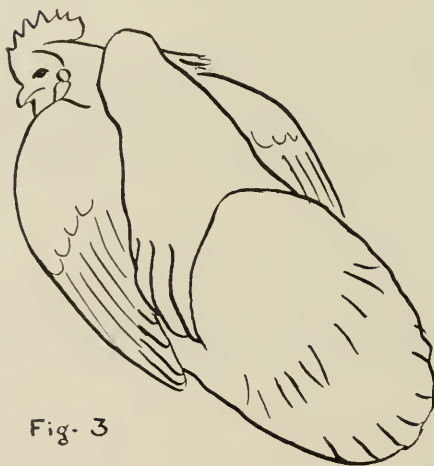


Fig. 3



Fig. 4

PLATE I

Fig. 1 shows the proper method of holding a bird. In reaching into a coop or crate grasp the bird by a wing and then slip the other hand under the body placing the index finger between the legs, the remaining fingers around one thigh and the thumb around the other so that the body of the bird rests on the palm of the hand. When lifted in this manner the bird will be perfectly comfortable. Should it struggle the thighs may be firmly grasped and the bird will be under complete control. All parts of the bird—head, back, wings, thighs, breast and body conformation can be readily examined with convenience and despatch, the bird shifted readily from the palm of one hand to the palm of the other. It is first examined for disqualifications then for general suitability as to breed and variety and physical fitness.

Fig. 2 shows the first measurement in determining market type, that of heart girth, the measurement being taken immediately behind the shoulders. The hand should be passed gently along the back from the shoulders to the rump the comparative width being noted at the various points, the spring of rib and the width of rump.

Fig. 3 measuring the spring of rib.

Fig. 4 measuring the width of rump.

It is essential that the birds have good heart girth and spring of rib and width of rump.

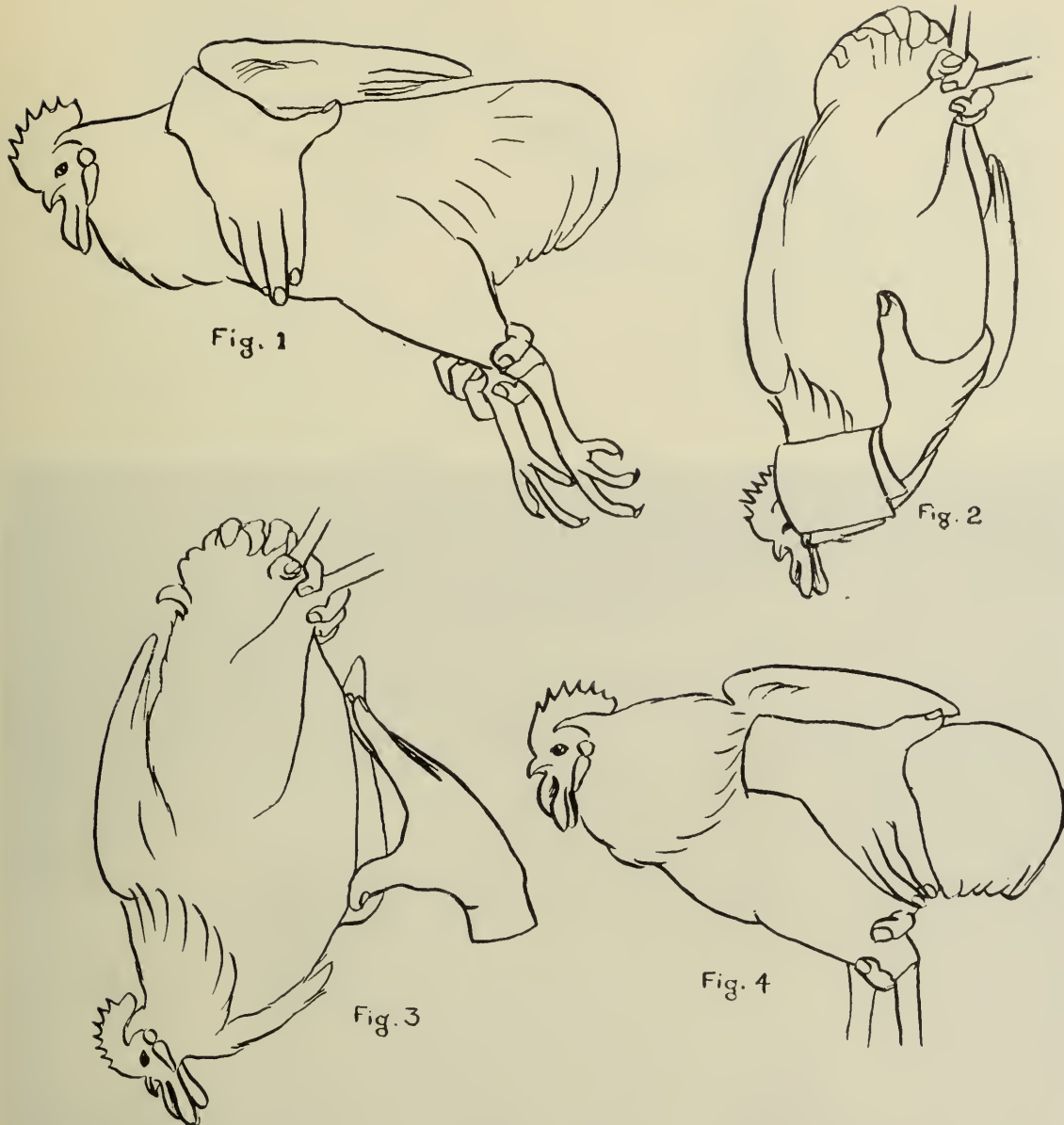


PLATE II

Fig. 1 shows the method of measuring depth of body from back of the shoulders to the point of keel. The depth here should be such that the keel is not unduly prominent. A large part of the extreme depth shown by some birds is due to an abnormally deep keel bone which adds nothing to body capacity, and is the largest single factor in placing so many birds in the lower grades.

Fig. 2 indicates the plumpness and fullness of breast. The condition is best judged by two measurements, the first gauged by the width of the breast at the shoulders, the second by the plumpness felt at the point of the keel.

Fig. 3 shows the method of measuring the length of keel. A medium to long keel is desired.

Fig. 4 shows the method of measuring the depth of abdomen. The depth of the abdomen should be such as will tend to give the bird a rectangular effect when the carcass is viewed from the side.



PLATE III

Photograph of a bird that shows a desirable length of keel.



Fig. 1

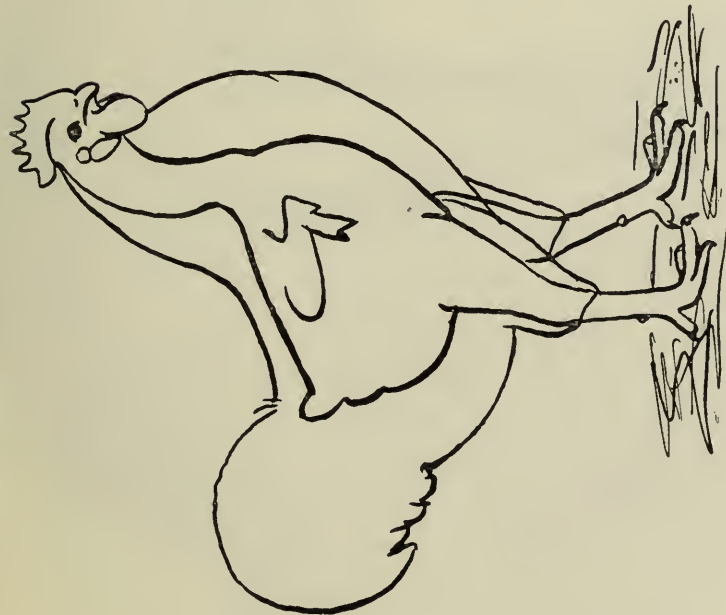


Fig. 2



Fig. 3

PLATE IV

Fig. 1 shows the ideal body type which gives the desirable market carcass. The point of keel is well carried forward and in general direction the keel parallels the back in a marked degree.

Fig. 2 shows an intermediate type in which the legs are set too far back resulting in an upright form of carriage.

Fig. 3 is an undesirable type, deep in keel, slab-sided and lacking in depth of abdomen.

VISUALIZING MARKET REQUIREMENTS IN THE LIVE BIRD

In the following illustrations of the four principal breeds, an endeavour has been made to indicate the relationship of desired body type to live bird outline.



PLATE V

A Barred Plymouth Rock.



PLATE VI
A White Wyandotte.



PLATE VII

A Rhode Island Red.



PLATE VIII
A White Leghorn.



SKIN TEXTURE

Fine texture in skin, comb and wattles and smooth scale in shanks and toes are indicative of fine texture in the meat. Roughness in skin and scale is indicative of coarseness in the texture of the meat.

BONE

The bone should be hard and sufficiently stout to meet the requirements of the bird. The smoothness of the scale is indicative of the quality of the bone. Coarse, very heavy bone is not desired. Coarse bone is frequently evidenced in a coarse beefy type of head which should be avoided, as it is commonly associated with low egg production.

FEATHERING

Early and even feathering in the chick is indicative of early body maturity.

SIZE FOR AGE

Care should be taken to ensure that the standard weight for the breed is maintained.