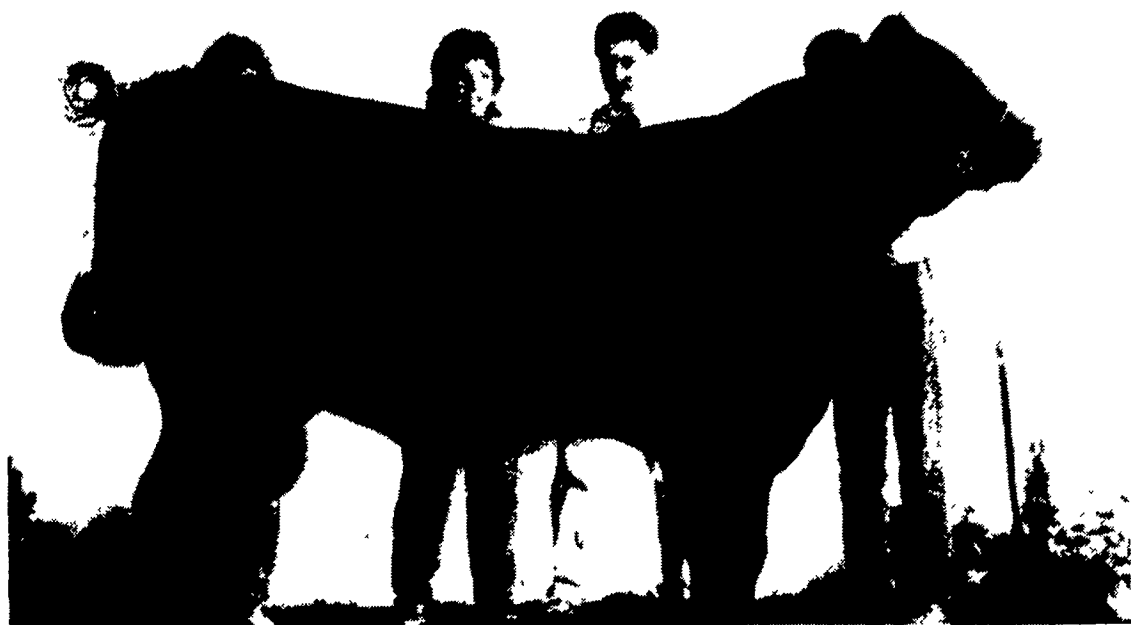


The grand champion female at the 1987 Maryland Angus Breeders Show held in West Friendship was Prospect Lady 22U. Also named the junior champ, she is owned by Mark Moxley, West Friendship, Maryland, and Indian Creek Farm, Stahlstown, Pennsylvania. Judge of the show was Mark Duffell, Forest, Virginia.

Photo by American Angus Association.



Intermediate champ, H F Jolt 623 stood as the grand champion bull for Huntingdon Farm, Alexandria, Pennsylvania, at the 1987 Maryland Angus Breeders Show, West Friendship. Judge of the show was Mark Duffell, Forest, Virginia.

Photo by American Angus Association.

Increasing Feather Sexing Accuracy

The sex of many commercial broiler strain chicks can be determined by the feather sexing technique. This technique involves comparing the relative length of the primary and covert feathers on the wing of a newly hatched chick. The two types of feathering possible are rapid and slow. The rapid feathering chick should have primary feathers much longer than the coverts. The coverts will be equal length to the primary feathers on the wings of slow feathering chicks.

The growth of the wing primaries and coverts is normally controlled by one pair of genes. These genes are located on the chromosomes that control the sex of the chick and are thus called sex linked genes. A mating of rapid feathering male parents with slow feathering females will produce chicks which can be feather sexed at hatching. The day old male chicks will be slow feathering and the female offspring will all be fast or rapid feathering.

While in theory feather sexing should be a simple and accurate process, application of the procedure has resulted in serious sexing errors in some instances. A trial was conducted at the Penn State poultry research farm to investigate reasons for difficulty in accurately sexing chicks by the feather method. One hundred and sixty eight chicks produced from a cross of rapid feathering Hubbard roosters and slow feathering Hubbard hens were individually wing-banded at hatching. The wing feathers were closely examined and the chicks classified into one

of 4 categories.

The 4 categories were as follows:

CATEGORY

1. Primaries longer than coverts
2. Primaries equal to coverts
3. Coverts longer than primaries
4. Coverts present- no primaries

The chicks were then placed in a floor pen and reared to seven weeks of age. At seven weeks, the broilers were processed and the sex of each bird was determined. During the seven week period, 5 chicks died; the distribution was: 2 chicks from category 1, 2 chicks from category 2, and one chick from category 3. The sex of the 5 chicks that died was not determined. The data collected at 7 weeks revealed that all chicks in category 1 were females and all chicks in categories 2, 3, and 4 were males.

Category 3 chicks had two different lengths of wing feathers at hatching, but the coverts were always longer than the primaries instead of the reverse situation. To the individual not trained to determine the sex of the chick by the relative length of the coverts to the primaries or to the individual trained to classify chicks with unequal primary and covert lengths as females, the chicks in category 3 would have been incorrectly sexed. The results of this trial indicate that individuals that feather sex chicks should be trained to observe the relative length of coverts to primary wing feathers or a high degree of error could be encountered.

CHICKS

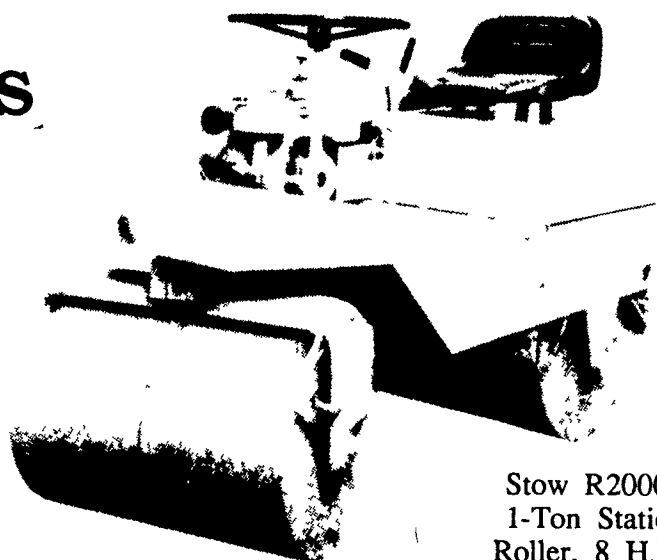
Hatching	%	7 weeks	%
80	47.6	78	47.9
46	27.4	44	27.0
34	20.2	33	20.2
8	4.8	8	4.9

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