

MANAGEMENT ESSENTIALS

Managing the Yield Plus Male

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The use of the Yield Plus™ Male in the United States has required a slightly different management approach, primarily due to the “yield” designation that is part of its name. When compared to other male strains, the Yield Plus Male will carry more breast muscle than his predecessors. As a result, farm managers will need to adapt some of their management strategies to ensure the Yield Plus Male reaches its full potential in the production house.

Management of the Yield Plus Male into Production

It is essential to rear the Yield Plus Male close to, and not beyond, the body-weight target. Excessive weight gain is to be avoided so as not to have a negative impact on performance. Feed management (feed volume, feeding space, feed distribution time) should be monitored closely to ensure that the males are not growing beyond the body-weight target, as this may cause them to be overweight. For specific information on feed management, please see the **Ross® Parent Stock Handbook**.

Yield Plus Males will mature faster after light stimulation than females. Closely monitoring sexual synchronicity and male/female behavior during this period will help to ensure that females become acquainted with the males and are open to mating.

Yield Plus Male Mating Ratios

One of the key differences between the Yield Plus Male and other male strains is lower mating ratios (**Table 1**). This is due to the Yield Plus Male being more active and able to provide for the same amount of females with fewer males than previous strains. Care should be taken during the initial mating-up period to ensure there are no signs of over-mating.

Table 1. Example of mating ratios.

Age (weeks)	# of Good Quality Yield Plus Males per 100 Females
22-24	9.5-10.00
24-30	8.00-9.25
30-35	8.00-9.00
35-40	7.50-8.75
40-50	7.50-9.25
50-depletion	7.00-9.00

Monitoring Yield Plus Male Breast Conformation

Fleshing

Weekly monitoring of the breast conformation or “fleshing” of the Yield Plus Male during both rearing and production is essential for achieving good male quality and optimal male performance.

The Yield Plus Male is prone to change fleshing quickly (the period between 28-38 weeks of age is key). In addition to recording weekly body weights, regular assessment and recording of fleshing score and breast muscle tone will determine if there is adequate breast muscle for skeletal size and also allow any changes to be identified. Where necessary, allow corrective action to be taken (review feed volumes and feed management procedures).

In the US, a scoring system of 1-5 (**Figure 1**) is used to assess fleshing. Males that score 1 are under-fleshed, while males that score 5 are over-fleshed. During the production period, a score of 3 is desired and considered best practice for Yield Plus Males.

Figure 1. Example of breast fleshing scoring system.



A lean, well-conditioned male will be more active and complete more matings than an over-fleshed male.

Firmness

In addition to the amount of breast fleshing, the firmness of the breast muscle needs to be considered. For the period between 28 and 35 weeks of age (just past flock peak) the muscle tone should be firm. Softening of the muscle tone may indicate that the Yield Plus Male is using his breast muscle as a source of nutrients.

Firmness tests (**Figure 2**) are often used to help determine breast muscle firmness. For Yield Plus Males, a score of “well done” to “medium well” is ideal. If firmness scores change to “medium” or “rare” it means that the bird is losing muscle tone and corrective action is required (review feed volumes and feed management procedures).

Firmness Test Procedure

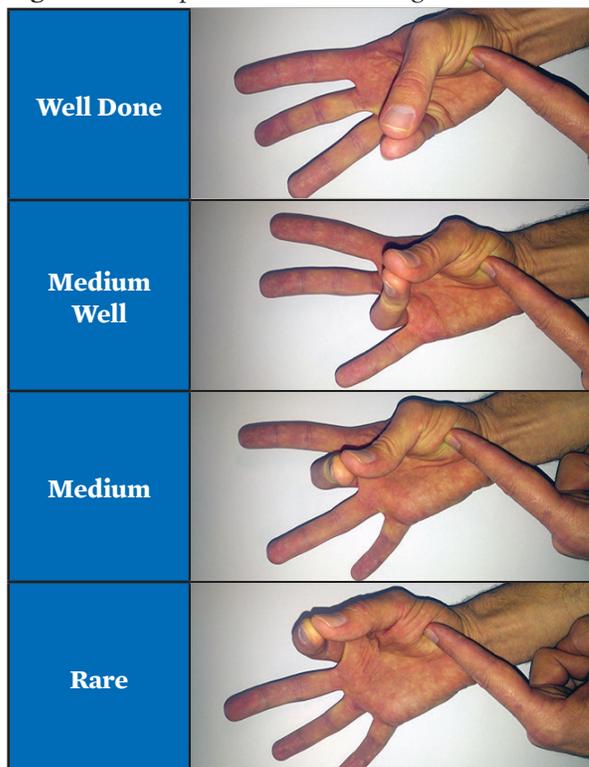
Step 1: Open and relax the palm of your hand.

Step 2: Gently press the tip of your pinky and thumb together.

Step 3: Using the index finger of your opposite hand, feel the fleshy area below your thumb. It should feel quite firm, like that of a steak that is Well Done.

Step 4: Repeat on your remaining fingers to achieve Medium Well (ring finger), Medium (middle finger), and Rare (index finger) scores.

Figure 2. Example of firmness testing.



Feeding the Yield Plus Male in Production

The most successful managers of the Yield Plus Male base their male feeding decisions on fleshing scores and muscle tone and their progression throughout the flock. If the males are uniform in weight and condition, increasing the male feed amount may suffice to provide the needed nutrients. However, if the males are not uniform, it may be better to provide “bonus” or supplementary feedings to ensure that all males receive adequate nutrition. Bonus feedings are sometimes necessary because of the more active mating nature of the Yield Plus Male. For example, some flocks are fed an extra 50% feed for 2 consecutive days at normal feeding time and then returned to the previous feed amount. By handling the birds as suggested, managers will be able to tell if the males need bonus feedings. As a rule, male feed amounts should never be reduced.

Replacement Males

By paying close attention to actual fertility levels, managers can determine if adding replacement males is necessary.

Care must be taken when introducing replacement males in Yield Plus Male flocks. The active nature of the Yield Plus Male can lead to over-mating after male replacement. Generally, these flocks will have good fertility and hatchability for 15 to 20 weeks of production but will not show expected results (persistence of fertility) after male replacement.

Conclusions

Managed correctly the Yield Plus Male can achieve maximum fertility levels for the life of the flock.

Key Considerations for the Yield Plus Male

- Rear the Yield Plus Male on the target body weight profile.
- Weekly handling for fleshing and firmness scores is essential.
- Excessive body weight can have a negative impact on fertility.
- Mating ratios will be lower than required for other male lines.
- Bonus feeding may be necessary in the production period.
- Adding replacement males to flocks that are performing well can lead to a decline in fertility.

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