64-WOOL RETURNS . . .

Effects of the main wool qualities on price are shown in the following figures; they can be only approximate because of the instability of wool values and the consequent difficulty of deriving valid average values:—

Grade		Approximate price per pound	
	Count	Nov. 1950	Jan. 1951
	52	110	151
BB	50	109	148
	$\frac{48}{50}$	106	140
	46/50	105	138
	46/48	107	140
в	52	106	149
	50	103	143
	48/50	103	140
	46/50	101	135
	46/48	103	135
с	(52	101	140
	50	97	133
	48/50	96	131
	46/50	95	129
	46/48	26	131

Grade and count (fineness) are shown to have an appreciable effect on values, and yield influences price at the rate of about 2d. per pound for each 1 per cent, change in yield. With wool at 140d, per pound, however, an increase in fleece weight of a few ounces can offset much loss of quality. Fortunately, all work on wool improvement tends to demonstrate that increased fleece weight, whether achieved by breeding or by feeding, is accompanied in some degree by improvement in quality.

Benefits of Culling

Worthwhile increases of wool production can be achieved by culling. The rate of culling of hoggets varies considerably with such factors as the lambing percentage and the death rate in all classes of stock, but usually it ranges from 30 to 40 per cent. of the hoggets available and under most favourable conditions may reach 60 per cent. Much of this culling can have the aim of raising wool yield.

Considerable evidence shows that of the increase in average wool production per head achieved by culling hoggets at least half remains in each subsequent year the

subsequent year the selected a n i m al s stay in the flock. Thus, if by culling 40 per cent. of hoggets the wool production of the remainder is increased by an average of 2/31b. per head, at least 1/31b. per head of increase is to be expected from these selected sheep in e a ch subsequent year, or during th e ir productive life a total increase of 1 to 111b. of wool per head. In many flocks the increase has been greater.

Only half the increase is realised in the 2-tooth and older ewes because hoggets vary considerably in age, size, and development, they are relatively immature and the weight of



wool carried has been influenced greatly by environment. Therefore the weight of a hogget's fleece is not a perfect index of production capacity at maturity.

In the selection of hoggets for heavy wool production a few important principles must be kept in mind. By and large, the stronger is the wool the heavier is the fleece. At present there is little premium for fineness, so in general the stronger types are more profitable. Wool surveys have shown that the better is the country the better is it able to grow stronger wools, as is illustrated in Fig. 4.

Therefore the finest wools in the flock are not the most profitable. Rather the aim should be, in moderation, to produce the stronger types which careful inspection indicates can be well grown on the country.

Selection of hoggets for heavier wool production is neither difficult nor very time consuming. The decision having been made on the count range to be aimed at, culling consists essentially of eliminating hoggets outside the range, those with short, dense, fuzzy fleeces ("down type"), and those with markedly faulty fleeces showing break, cotting, and weak open backs. The ideal is a long, well-grown, "meaty" staple, evenly and clearly crimped over the whole fleece, with belly and points well covered. Such a simple ideal, conscientiously aimed at by anyone with even a meagre knowledge of wool quality, cannot fail to achieve worthwhile results for the expenditure at the outset of no more than 1 day per 200 to 300 hoggets. Moreover, the efficiency of the work can be tested immediately by shearing the culled and selected sheep as two mobs and comparing mean fleece weights.

Fleece weight is only weakly inherited and the improvement achieved by culling largely disappears in the following generation. For example, if culling results in an increase in fleece weight of 1lb., only 10 to 15 per cent. of this increase can be expected in the progeny of these sheep. Greatest scope for permanent improvement lies in the selection of the flock sires.



ON some types of farm machinery adjustment levers and handles can inflict paintul injuries and occasionally are the cause of a fatality. For example, the handle in the illustration is so close to the fuel tank that it constitutes a hazard if a dip in the ground is encountered while an adjustment is being made. Plough handles also contribute to the toll of farm accidents. Some ploughs have handles which reach close to the operator's back. and men have been pinned to the seat by a tractor stalling on a rise from a sudden dip while the plough pushed forward. If the handle is so far away that the operator must leave his seat to make adjustments, losing his balance may result in his being mutilated by the implement. These conditions can be avoided by adapting implements to the type of tractor. All handles should be made to suit the tractor. Throttle handles may stick or be hard to reach in an emergency; they should be kept oiled and be placed in an accessible position.

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