

Shearing ewes at housing improves performance

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The price that producers receive for wool has nearly halved in the past year. Consequently the return from the fleece will not cover the cost of shearing in most cases. Many flock owners are now preparing to house their ewes thus enabling grass to accumulate for grazing post lambing. Shearing ewes, which will lamb in March, at housing has many advantages. The aim of this paper, the seventh in the current series, is to present results from studies at Athenry on how shearing at housing affects subsequent animal performance.

Shearing at housing

Three studies have been undertaken at Athenry which have evaluated the effects of shearing March-lambing ewes, at housing in December, on their subsequent performance and the performance of their lambs from birth until weaning. In each of these studies ewes were housed either unshorn, or shorn and offered grass silage *ad libitum*. For the 6 weeks prior to lambing ewes carrying singles, twins and triplets each received a total of 12, 20 and 25 kg concentrate, respectively. Ewes rearing singles and twins, and their lambs, were turned out to pasture post lambing and grazed as one flock until weaning, without concentrate supplementation. Ewes that were rearing triplets were turned out to pasture post lambing and managed as a separate flock and received 0.5 kg concentrate daily for 5 weeks post lambing. Lambs that were reared as triplets had access to concentrate, up to a maximum of 300 g daily, until weaning.

The effects of shearing ewes at housing on subsequent lamb performance are presented in Table 1. Shearing at housing did not alter ewe condition score at lambing. However, shearing the ewes at housing increased silage intake. The difference in silage intake between the shorn and unshorn ewes was similar from housing until lambing.

Lambs born from ewes that had been shorn at housing were 0.6 kg heavier at birth and 1.9 kg heavier at weaning. Whilst shearing at housing increased lamb birth weight, it did not affect the incidence of lambing difficulty or mortality.

The increased birth weight of the lambs from ewes shorn at housing was due to increased silage dry matter intake which was partly a reflection of cold stress immediately post shearing, and more importantly, a reflection of reduced heat stress in late pregnancy and an extended gestation period.

The increase in lamb weight at birth (0.6 kg) was trebled (1.9 kg) at weaning at 14 weeks of age. The increase in lamb weight at weaning obtained due to shearing ewes at housing is the same response as would be expected from providing 19 kg of creep concentrate to each lamb prior to weaning, which is equivalent to a cost of approximately €5/lamb. Shearing at housing (cost €2.50/ewe) is equivalent to a saving in creep concentrate of approximately €8/ewe for ewes rearing 1.7 lambs.

Previous studies at Athenry have shown that an increase in lamb weaning weight of 2 kg reduces the age at slaughter by approximately 2 weeks.

Effects on fleece weight

Season of shearing affects the weight of wool harvested. The effect of season of shearing on fleece weight is presented in Table 2. Shearing ewes at housing increased the weight of wool harvested by 0.3 kg/ewe relative to shearing in May.

Other advantages of shearing at housing

The recommended space allowance for unshorn ewes depends on floor type and ewe weight. For example, the recommended space allowance for ewes housed on slats and straw bedding is 1.1 and 1.2m² for 70 kg ewes; and 1.2 and 1.4m² for 90 kg ewes. The floor area required by shorn ewes is up to 20% less per ewe. Thus shearing ewes at housing enables more ewes to be housed in a given area.

Ewes shorn at housing are easier to monitor during late pregnancy and post lambing.

Shearing ewes at housing occurs during a period of low labour demand for flock management and consequently spreads the annual work load more evenly.

Shearing at other times

Some producers opt to shear their flocks in the autumn prior to joining the ewes with rams. Two studies were undertaken, one at Athenry and the second on a large commercial farm, to evaluate shearing either 4 weeks prior to joining (September) or at housing (December) relative to the traditional time (early summer). All ewes at each site were kept in one flock throughout the grazing and mating seasons and were housed in mid December and offered the same diet. The results of these studies showed that shearing the ewes in autumn resulted in approximately 60% of the benefit in lamb birth weight observed when shearing was at housing. Shearing in the autumn prior to the joining period reduced fleece weight by 0.5 kg; there was no beneficial effect on litter size (a claim that is sometimes made)

Conclusions

1) Shearing ewes at housing

- a) increases lamb birth weight by 0.6 kg
- b) has no impact on lambing difficulty
- c) increases lamb weaning weight by 1.9 kg
- d) reduces lamb age at slaughter by approximately 2 weeks
- e) increases fleece weight by 0.3 kg
- f) enables more ewes to be housed in a given area
- g) can provide exercise around the festive season

Table 1. Effect of shearing ewes at housing on subsequent lamb performance

	Shearing date	
	May	Mid December
Ewe condition score at lambing	3.5	3.4
Lamb birth weight (kg)	4.1	4.7
Lamb weaning weight (kg)	31.5	33.4

(Keady and Hanrahan 2008, 2009a; Keady et al. 2007)

Table 2. Effect of shearing ewes at housing on fleece weight

	Shearing date	
	May	December
Fleece weight (kg)	2.8	3.1

Keady and Hanrahan 2009b