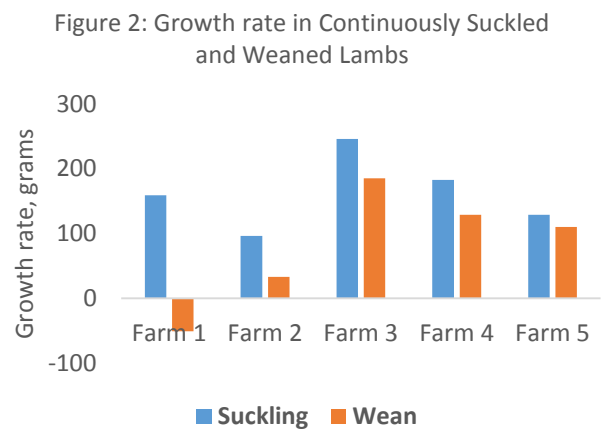
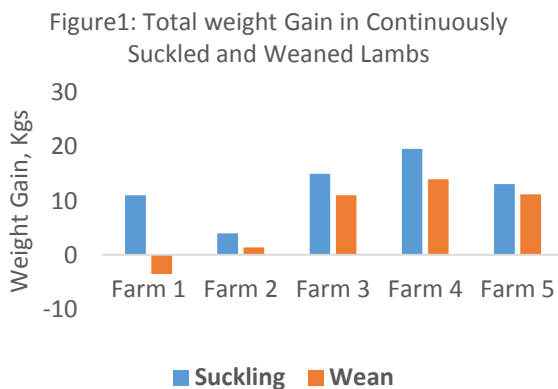


Early Weaning of Lambs Can Wean Away Profits!

Weaning lambs from their dams at 2-3 months of age followed by finishing in feedlots or on pasture is a common management practice among lamb producers. Early weaning (EW) is thought to reduce the nutritional demand on the ewes which should allow for optimum performance in the subsequent breeding period. However, studies conducted with hair sheep in the tropics showed that EW was associated with depression in growth and increase morbidity of lambs and did not improve fertility of ewes. In contrast the researchers found that continuous suckling (CS) until lambs were 5-6 months of age increased growth rate of lambs. Therefore, studies were conducted by researchers at WVU to further evaluate the effect of CS and supplementation (creep feeding) on growth performance of lambs

To determine the effects of continuous suckling and supplementation on growth

rate, 442 lambs born from lambing in the fall and spring located in 7 flocks located in WV, PA and MD were used in the study. Lambs were either weaned between 2-3 months of age or remain continuously suckling their dams for another 2-3 months. In initial replicates half of the lambs in each weaning type group was given ad libitum access to a 14-16% crude protein supplement or to pasture or grass-legume hay only. Due to the poorer performance of un-supplemented lambs (forage only diet) in subsequent replicates lambs assigned to both weaning types were supplemented. Lambs were weighed at the start of the experiment and at bi-weekly or monthly intervals. The average daily gain (ADG), total weight gains (TWG), and final weight for lambs in each treatment group were calculated. At all farms lambs that remained with their dams (CS) grew faster and gained more weight (Figures 1 and 2). The difference in growth rate and weight gain ranged from 19-210 g/d and 1.9 and 14.5 kg, respectively.



To determine the effects of continuous suckling on weight changes, body condition of dams and subsequent reproductive performance, the weight and BCS of the Dams were weighed at the start of the experiment and at monthly intervals. Dams were then treated to induce estrus and exposed to rams. The mean BCS of ewes at the start of the experiment was 2.4. The BCS of ewes increased to 3.1 at the end of the trial and was not affected by treatment. Reproductive performance was good in ewes suckling their lambs and in those from which lambs were weaned and weaning did not affect subsequent reproductive performance (Table 1). Ewes lambing in the fall and re-bred in the early winter months showed better reproductive performance than ewes that lambed in the spring and rebred in late spring and early summer months (Table2). Weaning resulted in a small improvement in reproductive performance of ewes that were re-bred in spring and summer.

Table 1: Effect of type of lamb rearing on reproductive performance of postpartum ewes

	Suckling	Weaned	Mean
Days Post-partum (days)	76.1	77.4	76.8
Pregnancy Rate (%)	65.2	58.7	62
Percent Lamb (%)	68.3	79.5	74.1
Prolificacy	1.6	1.7	1.7
Ram-Lamb Interval (days)	162	167	165.3

Table 2: Reproductive performance of postpartum fall and spring lambing ewes.

	Fall lambing	Spring lambing	Mean
N	36	56	-
Days Post-partum (days)	71	80.7	76.8
Pregnancy Rate (%)	75	53.6	62
Percent Lamb (%)	73	75	74
Prolificacy	2.0	1.4	1.7
Ram-Lamb Interval (days)	153	174	165.3

Overall lambs that were CS earned \$26.13 (\$9-\$67) more on average and generated a 16-24% increase in profit. Continuous suckling/“ewe-rearing” can be a sustainable, low cost management practice that can support increased productivity and profitability of sheep operations in the North Eastern USA.

For further information please Contact Marlon Knights at 304-293-1946 marlon.knights@mail.wvu.edu

Supported by

