WEANING MANAGEMENT OF SPRING CALVES ON FORESTED RANGES

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As the grazing season progresses from spring to fall, forage quality decreases. Published research by the Forest Service on northern California forested ranges revealed that yearlings made 75% of the summer's weight gain prior to August 1. The grazing period was from June 1 to September 30. Calves left on range with their dams usually do not gain weight in the fall because of a lack of high quality forage to meet the calf's requirement for growth and the cow's requirement for milk production. Maintaining a calf on fall range with no increase in weight or even some loss in weight does not improve income from those calves when sold later in the fall. It is advantageous to find a management tool that can provide for continued growth of calves during the fall months. Weaning the calves early and allowing them to graze hay aftermath is one approach. By September calves are capable of consuming enough forage for adequate growth, providing forage quality is high. Meadows that have been irrigated after hay harvest should provide a high quality forage.

Early weaning of calves has several fringe benefits. Weaning when the weather is warm and dry reduces stress to the calf and therefore less incidence of respiratory diseases common to weaning time. Also, in this type of management the calves will be sold after stress of weaning, and if sold directly off the ranch should bring more for this "preconditioning". Cows without calves will graze rough ground and do a better job of forage utilization in more inaccessible areas. As a result, condition of the cow going into the winter should improve.

PROCEDURE

This study was conducted to evaluate calf performance as influenced by two weaning times. Additionally, both weaning groups were further divided to observe the effect of vaccination for shipping fever - IBR complex at weaning for the prevention of respiratory problems post-weaning. Treatments applied were early weaned and vaccinated, early weaned with no vaccination, late weaned and vaccinated and late weaned with no vaccination. Early weaning was on September 17 and late weaning on October 15. Twenty-five calves were used in each treatment.

After weaning the calves were allowed to graze a barley stubble field for one week. During that time some alfalfa hay was fed with bloat blocks available so that calves could be switched to alfalfa aftermath with minimal problems. The pasture used was an alfalfa-orchardgrass meadow with two cuttings of hay removed and then irrigated. Bloat blocks were available to the calves at all times. Calves were observed daily for bloat and for symptoms of respiratory ailments.

RESULTS AND DISCUSSION

Table 1 presents the results of the study. Calves in all treatments were weighed on August 20 and again on September 17, the early weaning date, to get an indication of pretreatment gains. Calves in all groups gained similarly during the period previous to the early weaning. Calves were again weighed on October 15 when the late weaned groups were weaned. Calves early-weaned gained a pound per day during this period while those left on range with their dams gained less than half a pound. During the final period of the study, all treatment groups gained similarly. Apparently weaning stress was small in all groups as reflected by animal performance during the post weaning period.

Table 1. Calf weights and daily gains during the study period

Treatment	8/20	9/17	10/15	11/18	Total gain
	lb	lb	lb	lb	
Early weaned					
Vaccinated	366	431(2.4)[1/]	464(1.2)	505(1.3)	74
No vaccination	378	449(2.5)	478(1.0)	512(1.0)	63
Avg. early weaned	372	440(2.5)	471(1.1)	509(1.2)	69
Late weaned					
Vaccinated	374	441(2.4)	451(0.3)	486(1.1)	45
No vaccination	374	436(2.3)	431(0.4)	487(1.2)	51
Avg. late weaned	374	439(2.4)	441(0.4)	487(1.2)	48
Avg. vaccinated	370	436(2.4)	458(0.8)	496(1.2)	60
Avg. no vaccination	376	443(2.4)	445(0.7)	500(1.1)	57

1/ Numbers in parenthesis represent the average daily gain between each weight period.

No calves were diagnosed with respiratory problems during the post-weaning periods during this study. However, the station herd has had problems in other years. Outbreaks of post-weaning respiratory problems are very sporadic and vaccination treatments will be studied for two more years.

Early weaned calves gained 21 pounds more per head than late weaned calves during the fall grazing period (September 17 to November 18). With steer calves selling at $0.35 a pound and heifers at $0.27 returns would be $7.35 and $5.67 more per calf for each respective sex on the early weaning treatment.

Early weaning does mean that cattle must be gathered around September 1-15. On some operations late-season moves are common and no problem would occur. However, on other operations a special gather would have to be made. Other management procedures such as pregnancy testing, treating bad eyes and feet, and culling cows could be handled at this time. If adequate forage is available, cows without calves, to be culled later, would be heavier in the fall at sale time.