EFFECTS OF DEWORMING ON COW AND CALF PERFORMANCE IN EASTERN OKLAHOMA

K.C. Barnes¹, J.W. Walker², and K.S. Lusby³

Story in Brief

A study was conducted at the Eastern Research Station near Haskell, Oklahoma to evaluate the effect of deworming well fed cows and their calves when managed intensely on bermuda pastures. Deworming fall calving cows in November did not affect either cow weight change during the winter or gains of calves nursing these cows. Spring calving cows were dewormed right after calving in March and again in June and August. Calves of the dewormed cows were dewormed at the same time as their dams in June and August. Gains of dewormed cows and calves were not different from control cows and calves that received no worming agents. This study suggests that well fed cows in good body condition may not benefit from deworming.

Introduction

It is frequently recommended to deworm stocker calves grazing on heavily stocked tame pastures. However the question of whether to deworm cows in good body condition under similar pasture conditions is often debated. The objective of this study was to evaluate the effects of deworming on performance of cows and calves grazing bermuda grass pastures in Eastern Oklahoma.

Materials and Methods

This study was conducted at the Eastern Research Station located at Haskell, Oklahoma, about 16 miles East of Muskogee.

Trial 1

Nineteen spring calving Hereford and Hereford X Angus cows were used in the trial. The spring calving cattle were wintered on dormant bermuda pastures that were effectively grazed out before the winter and then grazed during the summer on bermuda pastures. From November 4, 1982 to March 31, 1983 the spring calving mature cows were fed free choice bermuda hay in large round bales that tested 7.0-8.5 percent crude protein. In addition to the hay, the cows also were fed 1.0 lb of cottonseed meal per head per day up to February 4 (beginning of calving) and were fed 2 lb of cottonseed meal from February 4 to March 31.

All cows and calves were weighed on March 31, which was the last day of hay feeding for the winter. At this time half of the cows were wormed with the recommended dosage of Tramisol injectable wormer. Calves received routine vaccinations, cows were tagged with fly tags and steer calves were implanted. On June 21, cows that had been wormed in March were reinjected with Tramisol along with their calves. All cows and

¹Area Specialized Agent ²Superintendent, Eastern Oklahoma Research Station Associate Professor

calves were weighed on August 12 and cows and calves that had been previously wormed were again treated, this time with Thiabendazole paste. Final weights were taken at weaning on September 21, 1983.

Trial 2

Twenty-seven fall calving cows were also wintered on bermuda pastures and provided free choice bermuda hay in large round bales testing 5.0-6.5 percent crude protein from November 8 to March 31. In addition the cows were allowed to graze wheat pasture on Monday, Wednesday and Friday. Calves were allowed access to the wheat pasture through creep gates during the entire winter period.

On November 30, 1982 the fall calving cows were allotted to two treatments, control and dewormed. One half of the cows were wormed with Rumatel at the recommended level. No calves were treated. Final weights were taken on March 31.

Results and Discussion

All cows used were in excellent body condition throughout the study. The adequacy of the nutritional program is supported by the good rebreeding performance seen in these cows. Of the spring calving females, 91 percent were pregnant after a 60 day breeding season while the fall calving cows had a 96 percent calf crop born the following fall.

	Control	Dewormed
Spring calving cows:	ange te bisgoorate	to be to be be and the set
Weight, 3/31/83	896	954
Change, 3/31 to 8/12	+64	+69
Change, 8/12 to 9/21	-18	-15
Spring born calves:		
Weight, 3/31/83	156	180
Change, 3/31 to 8/12	+234	+230
Change, 8/12 to 9/21	+60	+60
Fall calving cows:		
Weight, 11/30/82	1051	1089
Change, 11/30 to 3/31	-116	-122
Fall born calves:		
Weight, 11/30/82	147	146
Change, 11/30 to 3/31	201	207

Table 1. Effects of deworming on cow and calf performance.