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**CONTRACT GRAZING OF YOUNG BEEF CATTLE ON RYEGRASS IN THE
SOUTHEASTERN USA**

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Abstract

The objective of this study was to evaluate contract grazing (in which the landowner grazes cattle owned by someone else for a specified fee) as an alternative to traditional ownership of the cattle, in order to improve profitability of grazing young beef cattle on annual ryegrass under limited availability of operating capital in the southeastern USA. Production data from a two-year grazing experiment were used as a basis for an economic analysis which assumed market prices for the beef industry in the region. Return/ha over animal and pasture costs was \$312.20 for contract grazing, and \$477.50 for purchased cattle. However, if capital was restricted to \$30,000, total return over animal and pasture costs was \$ 6,957.18 for purchased cattle, and \$26,760.00 for contract grazing. The reason for this difference is that under contract grazing, animal and pasture costs were only \$350/ha, which allowed 85.7 ha to be planted and grazed, while corresponding figures for purchased cattle were \$2,059.34/ha, and 14.7 ha. It is concluded that contract grazing results in a lower return/ha, but a higher total return than purchased cattle if

land is available but capital is limiting.

Keywords: Cattle, grazing, ryegrass, *Lolium multiflorum*, economics, profitability, contract grazing, grazing fee

Introduction

Previous economic analyses of data from grazing experiments have assumed that cattle are bought at the start of the grazing season, and sold at the end (Hildreth and Riewe, 1963; Hart et al., 1988; Bransby, 1989). However, limited operating capital is often the factor that is most restrictive in determining the size and profitability of operations for grazing young beef cattle on ryegrass pastures in the southeastern USA. For example, these animals often cost about \$400 per head, and can be stocked at five animals per ha. The pasture cost is usually about \$300/ha.

Therefore, total animal and pasture costs come to about \$2,300/ha, which is several times greater than the investment needed to plant most field crops. Clearly, this relatively high investment/ha needed for this type of enterprise will limit its size if operating capital is limited. The objective of this study was to examine contract grazing (sometimes known as custom grazing), in which a landowner grazes cattle owned by someone else for a specified fee, as an alternative to traditional ownership of the cattle in order to improve profitability of grazing young beef cattle on annual ryegrass under limited availability of operating capital in the southeastern USA.

Material and Methods

Data for this analysis were obtained from a two-year grazing experiment conducted for 140 days, starting in December of 1993 and 1994 in south Alabama. Crossbred steers continuously grazed 'Gulf' annual ryegrass (*Lolium multiflorum*) planted in a prepared seedbed, and were stocked at 5

animals/ha. Average initial weight of animals was 220 kg. No hay or supplement was provided for animals during the experiment. The economic analysis was based on the assumption that only \$30,000 were available as operating capital. For contract grazing, a market price of \$0.77/kg of liveweight gain was assumed. If cattle were to be bought by the landowner, the following market prices were assumed: buying price; \$1.90/kg of liveweight, and selling price; \$1.56/kg. Pasture production costs were \$300/ha, and animal veterinary costs were \$10/head. A 2% death loss was assumed.

Results and Discussion

On average, cattle gained 1.29 kg/day. This resulted in liveweight production of 860 kg/ha/year after death loss. Total pasture and animal costs for contract grazing were \$350/ha. Gross income for contract grazing was \$662.20/ha, and this provided a return over pasture and animal costs of \$312.20/ha/year. If cattle had been bought by the landowner, return over pasture and animal costs would have been \$477.50/ha/year, which is \$165.30/ha/year, or 53% more than that for contract grazing.

Without further examination, this analysis suggests that buying cattle results in a greater economic return than contract grazing, and this is certainly true, even for large operations, if operating capital is not limiting. However, if only \$30,000 of operating capital were available, this would not be the case. For example, if cattle were bought, the cost/ha to plant, produce and stock the pasture would be \$2,059.34. This means that only 14.6 ha of pasture could be planted and grazed, and total return over pasture and animal costs for this operation would be \$6,957.18. In contrast, the area which could be planted and stocked under contract grazing is 85.71 ha, and total return would be \$26,760.00. This is nearly four times greater than the return projected for purchased cattle.

Conclusions

If operating capital is limited, but availability of land is not, contract grazing is likely

to be considerably more profitable than if cattle are purchased. The reason for this is that under contract grazing the available funds are used mainly to plant pasture, and not for purchasing animals. The net result is that a much larger area of pasture can be planted than if cattle were purchased, and even though return/ha is lower, total return is several times greater. While the negative relationship between price/kg and animal weight in the USA undoubtedly had a distinct effect on the specific results of this analysis, the general principle demonstrated by this study should apply across a wide range of market conditions.

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