

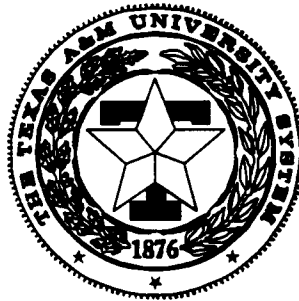
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## COMPARISON OF GROWTH AND CARCASS CHARACTERISTICS OF YEARLING EUROPEAN FALLOW WITH AXIS BUCKS

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**Background.** Different species of deer are being used for venison production. Two important species used are the Fallow and Axis. The objective of this experiment was to evaluate growth from weaning to slaughter and carcass traits in European Fallow and Axis yearling bucks.

Six European Fallow and 6 Axis bucks produced at the Texas Agricultural Experiment Station at Overton were weaned in October, 1995 and commingled for this experiment. Prior to availability of rye-ryegrass pastures, the bucks were kept in drylot and received 3% of their body weight of 2:1 alfalfa pellets:ground corn and free choice Coastal bermudagrass hay, salt, minerals and water. The bucks grazed rye-ryegrass pastures from January through April and Coastal bermudagrass pastures from April through August with free choice access to water, salt and minerals. The bucks were weighed at 28 days intervals throughout the 305 day experimental period. Carcass data collected included hot carcass weight, dressing percent, carcass and leg conformation scores, leg weight (bone in), tenderloin weight and boneless sirloin weight.

**Research Findings.** Body weight gains were similar in both species (Table 1) but live weight at slaughter tended ( $P<0.08$ ) to be greater in Axis compared with European Fallow bucks (Table 2). Hot carcass weights were greater ( $P<0.001$ ) for the Axis than the European Fallow bucks and dressing percent was also greater ( $P<0.0001$ ) for the Axis bucks (Table 2).

Carcass and leg conformation scores (1-12) were better ( $P<0.02$ ) in Axis compared with European Fallow bucks (Table 2). Weight of the leg (bone in) was greater ( $P<0.0001$ ; Table 2) and made up a greater ( $P<0.03$ ) proportion of hot carcass weight (Table 3) in Axis compared with European Fallow bucks. Weight of the tenderloin (Table 2) tended ( $P<0.06$ ) to be greater and tended ( $P<0.09$ ) to make up a greater proportion of hot carcass weight (Table 3) in Axis compared with European Fallow bucks. Weight of the boneless sirloin (Table 2) was greater ( $P<0.002$ ) and made up a greater ( $P<0.05$ ) proportion of hot carcass weight (Table 3) in Axis compared with European Fallow bucks.

**Application.** Growth traits were similar in Axis and European Fallow bucks from weaning to slaughter as yearlings. Carcass characteristics such as hot carcass weight, dressing percent, carcass and leg conformation, and proportions of the carcass in the leg, tenderloin and sirloin were superior in Axis compared with European Fallow bucks. However, temperament favored the European Fallow bucks over the Axis in their acceptance of handling and management.

Table 1. Body weight gains (mean  $\pm$  standard error) from weaning through slaughter in yearling European Fallow bucks compared to Axis bucks.

Parameter	Species		Probability
	Fallow	Axis	
305 day weight gain (lb)	48.0 $\pm$ 1.6	48.7 $\pm$ 1.6	P > 0.1
Average daily gain (lb)	0.157 $\pm$ 0.005	0.160 $\pm$ 0.005	P > 0.1

Table 2. Comparison of carcass characteristics (mean  $\pm$  standard error) of yearling Fallow bucks compared to Axis bucks.

Parameter	Species		Probability
	Fallow	Axis	
Liveweight (lb)	107.7 $\pm$ 2.7	115.3 $\pm$ 2.7	P < 0.08
Hot carcass weight (lb)	58.0 $\pm$ 1.5	68.0 $\pm$ 1.5	P < 0.001
Dressing percent (%)	53.9 $\pm$ 0.4	59.0 $\pm$ 0.4	P < 0.0001
Carcass conformation score (1-12) <sup>a</sup>	3.2 $\pm$ 0.3	4.5 $\pm$ 0.3	P < 0.02
Leg conformation score (1-12)	3.2 $\pm$ 0.6	5.6 $\pm$ 0.6	P < 0.02
Leg weight - bone in (lb)	17.6 $\pm$ 0.5	21.5 $\pm$ 0.5	P < 0.0001
Tenderloin (lb)	0.9 $\pm$ 0.1	1.4 $\pm$ 0.2	P < 0.06
Sirloin - boneless (lb)	6.3 $\pm$ 0.2	7.4 $\pm$ 0.2	P < 0.002

<sup>a</sup>1 = poorest, 12 = best

Table 3. Proportions (%) of hot carcass weight (mean  $\pm$  standard error) in various portions of the carcass in yearling Fallow bucks compared to Axis bucks.

Parameter	Species		Probability
	Fallow	Axis	
Leg - bone in	30.3 $\pm$ 0.3	31.6 $\pm$ 0.3	P < 0.03
Tenderloin	1.4 $\pm$ 0.2	1.9 $\pm$ 0.2	P < 0.09
Sirloin - boneless	9.8 $\pm$ 0.3	10.8 $\pm$ 0.4	P < 0.05