

Wapiti/Elk - the animal and its management

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Introduction

In 1905 President Theodore Roosevelt donated some North American wapiti to New Zealand and these were liberated as a founding hunting herd in the south western part of the South Island (Fiordland) of New Zealand. The animals interbred with red deer and by 1970 the feral herd was of mixed blood with some individuals showing almost pure wapiti characteristics and others mainly red features. Some of these hybrid deer have been captured and are now farmed as Fiordland wapiti. From 1981 there have been a number of North American wapiti (commonly called elk) introductions and these are being farmed as pure bred lines. Controlled cross-breeding on farms between wapiti and red deer is now common.

Management and Feeding

Wapiti and hybrids are easily managed on the farm and show less signs of panic than most red deer when being moved between paddocks. Care and understanding are needed when yarding and handling these big deer. Individual animals can react unpredictably to pressure, unskilled handling or hassle and may become stubborn and refuse to budge. When bringing wapiti into yards it is wise to set up the gates so that the animals can be moved to the work area without delay, and to avoid over-crowding. Specialist squeeze crushes have been developed that work well with wapiti. Pure bred wapiti are large animals, but not just large red deer, and need appropriate feeding. The provision of good quality roughage (eg, lucerne hay) at all times of the year is beneficial and the bulls need special feeding care during the winter and a well planned animal health programme.

Cross Breeding with Red Deer

It will always be necessary for some farmers to run pure bred wapiti operations to protect and improve the genes with high impact selection programmes, and there is now an animal register for pure wapiti which is run by the New Zealand Wapiti Society. The biggest impact of the breed, however, is in the provision of high quality hybrid bulls to use as sires over commercial red deer. The New Zealand deer industry is now trading profitably on the products of venison and velvet antler, rather than an inflated live animal market. For the small cost of extra feed to a few hybrid sires, red deer farmers are able to increase the size of progeny, their growth rate, carcass weights, velvet weight and grade. Specialised breeders using pure wapiti bulls over well grown red hinds are producing half bred terminal sires which red deer farmers can use with safety and no extra management costs. The quarter bred progeny will generally have a growth rate advantage over red deer in the same herd of about 20%. The basic quality of the red deer breeding herd can be protected by using top quality recorded red deer studs to provide herd replacements.

Velvet Antler

The Korean market clearly recognises good style wapiti velvet as the most valuable product. The December 1992 Wapiti Velvet Pool attracted buyers who paid \$166 to \$196/kg for the top wapiti grades and \$130/kg for the lower two wapiti grades. These prices compared with \$135 for the top red velvet grade and around \$115 for the more typical A and B grades. In addition to top prices/kg, wapiti will cut 20 to 50% more weight than similar aged red deer, depending on the amount of wapiti blood in the animals. As the market moves towards a buyer's market, which will increasingly discriminate against poorer quality product, the better wapiti animals will become more important. In 1992 the top price for velvet antler was \$196/kg, paid for a Wapiti Pool lot called Wapiti Supreme. Recognition of this product in a new grade is expected for 1993 as long as it is possible to adequately describe Wapiti Supreme. Antler in this grade will be able to be outgrown 5 to 15 days further than normal wapiti but will need to exceed 20 cm in circumference

and show little calcification. Wapiti Supreme could be expected to exceed Wapiti 1 by 10% to 15% in weight and attract a premium price/kg.

Venison

Just how good venison is in edible meat yield compared with traditional meats is shown in the table. Although all venison is very high in lean content, wapiti/red is the highest.

When a customer is buying meat the proportion that can be served on a plate is critical. Deer and wapiti/red animals in particular show best returns to the purchaser.

The progeny from using a wapiti hybrid sire over red hinds have three major advantages:

- The males can be slaughtered at a young age and still achieve a 55 to 65 kg carcass. This will assist in spreading the kill to provide better continuity of supply for export venison.

- Some males can be grown out to heavy but lean weights as 2 year olds. The very best of these after 2 year velvet harvest can be kept for the specialist velveting herd. Heavy weight lean carcasses from young animals will attract premium prices for some niche markets.
- A significant amount of venison is now coming from hinds. Hybrid females can be slaughtered at premium 55 to 60 kg carcass weight as yearlings whereas most red deer yearling females are struggling to achieve 45 kg in carcass weight.

Conclusion

Wapiti genes can be grafted into the New Zealand red deer industry to improve returns from venison and velvet antler. This process will not be detrimental to the framework of the national herd which should continue to be upgraded with the best proven red deer stags.

Meat characteristics from several animal species

Species	Carcass weight (kg)	Lean	Yield (% carcass)			Lean/fat
			Fat	Bone		
Wapiti/red	67.6	76.0	4.7	19.3	16.2	
Red	62.6	72.7	7.0	20.3	10.4	
Fallow	26.0	73.9	9.1	13.6	8.1	
Beef	239.0	59.0	23.0	18.0	2.6	
Lamb	14.2	54.3	23.5	16.9	2.3	
Pork	52.0	48.0	25.0	27.0	1.9	
Chicken	1.2	59.0	15.0	24.0	3.9	