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### Other Deer Products

G. W. ASHER

Ruakura Agricultural Center,  
MAFTech, Private Bag,  
Hamilton, New Zealand

While venison will undoubtedly be the principle product from farmed deer, there are a number of additional products that either stand on their own (e.g. velvet antler) or are by-products from venison production.

#### Velvet Antler

"Velvet" refers to the outer dermal layer of growing antler. However, in relation to the saleable product, the term velvet (herein termed "velvet antler") refers to the entire growing antler harvested for use in traditional Asiatic medicines and tonics. Velvet antler is generally harvested from live male deer at a predetermined stage of growth relative to the date of casting of the previous antler. As it consists of highly vascularized and innervated tissue, it is invariably removed under anaesthesia and analgesia by veterinarians.

Velvet antler is removed from red deer stags at 55 to 70 days post-casting and may have a total wet weight (frozen) of between two and ten pounds. Elk velvet antler is generally cut at a similar stage, but is usually considerably heavier (four to sixteen pounds). Stag/bull age and genetic heritage are the main factors affecting yield.

Velvet antler is removed from fallow deer bucks at 35 - 40 days post casting due to earlier calcification in this species. As a consequence, yields from fallow bucks are as low as one-half to one pound.

The Asiatic markets for New Zealand product (mainly Korea) prefer red deer and Wapiti velvet antlers over fallow deer product. Present returns for red deer velvet antler range from \$NZ 150 to \$NZ 250 per kilogram wet weight (\$75.00 to \$125.00 per pound). This represents a very lucrative return to the farmer. Even fallow deer velvet antler may fetch \$NZ 60 to \$NZ 90 per kilogram (\$30.00 to \$45.00 per pound).

However, there is a certain degree of conflict between velvet antler production systems and venison production systems. Antler yields increase with increasing stag/bull age and the first high-value cut is not obtained until the stag/bull is at least two years of age. At this age, the animal is generally unsuitable for venison. Most venison stags/bulls are slaughtered earlier, between twelve and twenty months of age. This is also true for fallow deer. Therefore, for venison production herds, velvet antler is generally only removed from those males retained for use as sires (only three to six per cent of the total deer herd).

Markets for velvet antler are not always readily available in the U.S.A. or Canada. However, large ethnic Asian populations in some major North American cities (e.g. San Francisco, Vancouver) do use traditional medicines and tonics. It may be possible to establish markets in these metropolitan areas. It may also be possible to export antler to Asia. However, the product will compete with the large volumes of velvet antler produced in New Zealand, Russia and China.

Velvet antler should always be removed under veterinary supervision. Once removed, it should be suspended upside down, chilled and then stored frozen in plastic wrap.

If antlers are not removed from male deer as velvet, they are often removed as hard antler. This product also is saleable, either to the Asiatic market or to those interested in manufacturing antler ornaments. Cast antlers are sometimes marketed as trophies (heaven forbid I should ever display them above my fireplace).

#### By-Products from Slaughtered Deer

(a) Hides: Deer hides are a potentially valuable by-product from slaughtered deer. In New Zealand, virtually all hides are used in suede leather production and will return to the farmer between \$NZ 20 to \$NZ 40 (often the value of the hide offsets the slaughter and processing fees). Deer suede is used in fine garment manufacture as it is fully washable.

Presently, in New Zealand a number of Deer Slaughter Premises (DSP's) buy hides under grading systems. This penalizes farmers who present animals with damaged hides (abrasions, tick damage, etc.).

There seems to be little or no marketing of tanned deer pelts (i.e. hair on) in New Zealand. Deer hair is not particularly enduring and pelts damage rapidly. However, markets may exist in U.S.A. for fallow deer pelts, particularly for some appealing genetic coat color types.

(b) Tails: Red deer tails contain a deposit of brown fatty tissue that serves as a scent gland. Red deer tails are dried and marketed to Asia for use in herbal medicines and tonics. Returns to the farmer range between \$NZ 5 to \$NZ 20 per tail. Fallow deer tails do not contain this gland and have no commercial value.

(c) Pizzles: The dried penis and testes, collectively called the "pizzle", are also sold to Asian markets. Returns to the farmer range between \$NZ 5 to \$NZ 10 per pizzle.

(d) Eye Teeth: The upper canine teeth of red deer and Wapiti are sometimes extracted after slaughter and sold for use as jewelry. (There is no accounting for taste!). Returns to the farmer are highly variable.

(e) Offal: Saleable offal includes the liver, kidneys, heart and tongue. It can be difficult to establish markets for these products due to the very limited numbers of deer slaughtered.