

Chinese deer farm industry

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It is an honour for me, on behalf of Chinese deer farmers, to briefly address this World Deer Congress on the deer farming industry in China. Originally, Professor Wang Shuzhi, from Jilin Agricultural University, was proud to be invited by the Congress to present his paper on this topic. Unfortunately, he was unable to attend the Congress, and at short notice I have prepared this talk.

As you may know, China was the first country in the world to farm deer and to utilise deer products. A silk scroll recovered from a Han tomb (Ma Wang Dui in Hunan Province) provides historical evidence that deer products were already in use more than 2000 years ago. Commercial farming of deer began in the Jilin Province in 1733 - the Qing Dynasty. Prior to the new China's establishment in 1950, there were fewer than 600 farmed deer in Jilin Province and the reproductive survival rate was very poor, about 25 to 30%. Following 1950 a lot of new deer farms were established, one after another, all over the country. According to recent statistics the total farmed deer population has reached 300,000 and reproductive survival rate is very high, at approximately 90% in sika and more than 50% in wapiti.

Deer Species

Of the 300,000 farmed deer, 85% are sika deer; with the balance made up of wapiti, complemented with white-lipped deer, reindeer and musk deer, etc. The sika deer farms are mainly located in the north-east with the wapiti farms situated in the north-west of China. The sika is a mid-sized deer species with live weights in the region of 120 kg for adult stags and 70 kg for adult hinds. The average weight per pair of 3-tine velvet antlers is over 2.5 kg. Wapiti is a large-sized deer species with live weight ranging from 230 to 300 kg for adult stags and 160 to 200 kg for adult hinds. The



weight per pair of 4-tine wapiti velvet antler is over 7.00 kg.

Feeding Systems

Walled enclosure

Deer are restrained for their entire life in specially designed pens and are fed prepared feed. This system is used on about 90% of Chinese deer farms.

Restricted pasture grazing

Deer are grazed on pastures which are surrounded by fences, often electric. In the winter season concentrated feed is supplemented on the pastures.

Pasture grazing without restriction

Deer in this system are bottle reared and tamed from birth. The animals are released to pastures in the early morning and brought back to their pens in the evening. Concentrated feed is supplemented in their pens. During grazing the herd is controlled by people or sheep dogs.

Feed Types

The type of feed offered to the farmed deer within the walled enclosure varies according to season, sex and age. For example adult stags in spring are offered corn silage, wheat residue and soybeans while recovering from the rut. In summer hay and shrubs replace the corn silage, the proportion of soybean is increased to

enhance velvet yield. In autumn, after velvet antler is cut, the concentrated feed for velvetting stags is largely reduced to inhibit their libido, but for sires, concentrated feed remains stable. Concentrated feed is kept at a minimal level during winter to suppress libido.

Mating System

Within the walled enclosure deer farming system, both artificial insemination and natural mating are used, with the latter being preferred.

Group mating

A ratio of 1:4 male to female are penned together. During the mating season sires not in good physical condition or with low libido are removed. This method is not as popular now as it used to be.

Sire rotation mating

One sire is put in a pen with 20 to 25 hinds. The sire is changed every 4 to 5 days.

Single sire mating

A selected sire is put in a pen with about 20 hinds and remains there for the entire rut. This is the mating method currently accepted by the majority of deer farmers.

Handling System

Both deer crushes and tranquillisers are used for velvetting and animal husbandry procedures. The crush only is used for velvetting sika deer while both crush and tranquillisers are used for velvetting wapiti.

Deer Products

The aim of the Chinese deer farming industry is to produce velvet antler and deer co-products. Venison production is not paramount. For commercial purposes 3-tine velvet antlers are cut from sika deer while 4-tine velvet antlers are harvested from wapiti.