## Intensive containment systems: game farming

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Game farming is a production mode in which game animals are managed, handled, and slaughtered in similar ways to traditional livestock. Inherent in this definition is the use of supplementary feeding, weighing, individual animal identification, veterinary procedures, modern genetic selection, and organised slaughter at abattoirs where *ante-* and *post-mortem* inspection is possible. Although farmed venison still makes a modest contribution to international production and trade, it is a rapidly growing production mode and promises to dominate emerging international markets.

Although game farming might seem not to capitalise on the unique ecological adaptations of wild animals, many species (particularly deer of the subfamily *Cervinae*) are amenable to intensive husbandry. The practical advantages of intensive husbandry include the ability to ensure high standards of disease control and hygiene which facilitates development of new specialty markets, and the option to use relatively small land bases which allows diversification of existing agricultural enterprises.

Game farming is both very old and very new and is practised in many parts of the world (Table F.1). Deer have been farmed on a commercial scale in China for many decades. The industry had a later start in Korea but interest is strong and populations of farmed deer continue to grow rapidly. On the other hand, deer farming in North America and Japan are embryonic industries. The Soviet Union is among major deer producing countries but the diversity of operation and the enormous size of the country make it difficult to determine the relative contribution of game farming, ranching, or commercial hunting. Deer farming in New Zealand has been spectacularly successful, starting in 1970 and growing to more than 300,000 animals by 1986. The breeding herd has doubled every 3–4 years.

In the Orient, velvet antlers for pharmaceuticals are the main product of

the deer industry. A number of Western countries serve this lucrative market although the removal of antlers in the velvet is prohibited in the United Kingdom. Despite current prices, the antler trade cannot be perceived as a growth industry for Western countries. International deer/game farming organisations must establish attractive meat markets to ensure continued growth. With knowledge and skill, game producers will be able to establish a new generation of meat products which are rich in all the best attributes of red meat but lacking in the real or perceived disadvantages of excess fat.

The following chapters review deer farming on a regional basis; Oceania, Europe, and Asia. The firmly established North American bison industry also is described. Other intensive production systems such as those for muskoxen and musk deer which remain at an experimental stage are covered in Section G.

Table F.1. Some game farming systems.

Geographical area	Animal species	Approx. numbers farmed	Grazing management	Main products
China	Sika and malu deer	300,000	Intensive	Velvet antler
New Zealand	Red, fallow, and wapiti	300,000	Extensive/	Meat and velvet antler
USSR	Sika and maral deer	90,000	Extensive	Velvet antier
North America	Bison Wapiti	88,000 6,000	Extensive/ intensive	Meat Meat and velvet antlers
Australia	Fallow, red, and rusa deer	40,000	Extensive/	Meat, velvet
Korea	Sika deer Red deer Wapiti	52,000 2,000 3,000	Intensive	Velvet antlers
Mauritius	Rusa deer	4,000	Intensive	Meat for local markets and by-products
United Kingdom	Red deer	10,000	Intensive	Meat
Alaska	Muskoxen	100-200	Intensive	Fibre (giviut)
Japan	Sika deer	Few	Extensive	Meat and velvet antler