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Non-Native Deer Farming Symposium





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CHAPTER 1

INTRODUCTION TO DEER FARMING

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Deer farming refers to the raising of deer for venison, velvet antler and oriental byproducts (Haigh and Hudson, 1993). In the US, this usually occurs on small acreages of improved
pastures. Game ranching is the management of deer for recreational hunting on large acreages
of usually native rangeland. The management and nutritional principles discussed in this
handbook are directed toward deer farming but many can be applied to game ranching.

Deer farming is not new. Archaeological digs indicate Phoenicians used domesticated deer around 4000 B.C. and the Chinese have a history of deer use that dates back 5000 years (Haigh and Hudson, 1993). Reports on domestication of deer in North America occurred about 100 years ago. USDA published a farmer's bulletin on deer farming in 1908 and 1910 (Haigh, 1994). Interest in deer farming decreased until the mid-1970's when the modern deer farming industry began to develop because of the surge of activity in New Zealand and Europe in marketing venison and deer by-products. In 1993, the estimated sale of deer and deer products produced in the US was \$3.8 million (Willard, 1996). The population of non-native deer in Texas has increased over 300% from 27,538 in 1974 to 90,112 in 1994 (Mungall and Sheffield, 1994). A 1996 survey of exotic hoof stock operations in Texas reported 106,000 non-native deer of which 91,000 were under high fence (Texas Agricultural Statistics Service, 1996). The predominant deer breeds were axis - 55,400, fallow - 27,200, sika - 12,000 and red deer - 4,800. Inability of the native white-tailed deer to utilize warm-season perennial grasses does not allow them to be farmed as readily as the introduced deer species.

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Deer farming has many advantages. Because grasslands are used to meet most of the nutrient requirements of the deer, it is an environmentally friendly agricultural system that protects both soil and water. Deer farming can be on as few as 4 to 5 acres and is well suited for small land owners or larger farms or ranches which desire to diversify. Five acres of improved pasture in east Texas are sufficient for a one-buck herd of 25 to 30 does and to carry the weaned fawns to slaughter weight. Venison is a lean meat, low in fat and cholesterol, which is an attractive alternative to chicken and fish for health conscious Americans (Forss, 1977). At the present time, US venison production cannot meet demand. From 80 to 90% of the venison marketed in the US is imported from New Zealand. A marketing survey of Texas restaurants reported that approximately 20% of the hotel, country club and German-theme restaurants served exotic game meat (Clary and Randel, 1995). Because non-native deer can reach slaughter weight on well managed pastures, grain feeding in concentrated feeding operations such as are required for production of poultry, swine, dairy and beef are not necessary.

However, deer farming is not without risk. As with other agricultural enterprises, good management is necessary along with an understanding of pasture production, deer nutrition, growth, reproduction, herd health as well as economics. Deer are more difficult to handle than other livestock and require special fencing and handling facilities. Individuals interested in deer farming should visit deer farming operations in their area and obtain information from public agencies such as universities, the Agricultural Extension Service, and Agricultural Experiment Stations. The objective of the following chapters is to provide information on many facets of deer farming. We believe that the staff at the Overton Center and their colleagues at Texas A&M University are at the forefront of the deer farming industry in the United States. The authors hope that this handbook will enhance the profitable expansion of deer farming in Texas and other areas of the US.

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