

## INTRODUCTION

Information available from research linked to deer in Australia and internationally continues to expand. However, results of production related research is often not provided in a format easily understood by those who are most likely to benefit from it, deer farmers.

This book was produced in response to the ongoing requests for a summary of known information about deer production presented in an 'easy to use' format for new and existing deer farmers.

Researchers and industry experts have reviewed each chapter of the book to ensure accuracy of information presented.

*Included within the text are reference numbers in square brackets [ <sup>1</sup> ]. The number within the square brackets corresponds to the number listed in the reference section of this book. This provides readers with an opportunity to research specific references related to areas of interest.*

### Origin

Deer are not indigenous to Australia. They were introduced during the Nineteenth Century under the Acclimatisation Programs governing the introduction of animals and birds into Australia. Six species of deer were released at various locations. These animals dispersed and established wild populations at various locations across Australia mostly depending upon their points of release into the wild. They formed the basis of the Australian deer industry.

Deer farming commenced in Victoria in 1971 with the authorised capture of Rusa deer from the Royal National Park, NSW. Until 1985 four species of deer, two from temperate climates (Red and Fallow) and two tropical species (Rusa and Chital), were confined for commercial farming. Late in 1985 the relaxation of import protocols saw the introduction of the North American Elk (Wapiti) and large numbers of Red deer from New Zealand.

### Industry Structures

The first deer industry organisation was the Australian Deer Breeders Federation that was formed in 1979. The Industry organisation grew and developed into the Deer Farmer Federation of Australia (DFFA) and subsequently evolved into the Deer Industry Association of Australia (DIAA).

<sup>1</sup> [ <sup>1</sup> ] refers to a reference listed in the reference section of this book

The DIAA represents all sectors of the Australian Industry and members subscribe directly or through state organisations, breed societies or processing associations.

The DIAA has incorporated Deer Industry Projects and Development Pty Ltd as a wholly owned subsidiary to support product development and research on behalf of the industry.

The company trades as the Deer Industry Company and undertakes project work to assist the industry achieve its goals as described in the Industry five year plan, and as otherwise required by the DIAA.

### **Markets**

During the early growth years of the industry the market development of velvet and venison was constrained by limited supply, due to the small size of the Australian herd. Therefore, development was restricted to the more easily accessible domestic markets.

By 1990, the volume of velvet available from the Australia herds was sufficient for the DFFA to commence the first national velvet pools, which later developed into Australian Deer Horn and Co Products Pty Ltd. In 2003 this company was sold to private interests. It continues to market the majority of velvet antler Australia produces.

Markets for venison expanded noticeably under the influence of the Venison Market Development program funded by RIRDC from 1992-96. The significant increase in domestic consumption of venison during this period was bolstered dramatically by the overseas demand for Australian venison that developed from 1993-94.

However, the rapid increases in exports of venison have been accomplished at the expense of maintaining the size of the national herd, (depletion of female stock through slaughter for venison and live exports). Consequently the DIAA's top industry priority is to increase the national herd size, in an endeavour to maintain, let alone expand, existing venison production.

### **Herd Size**

Deer Industry estimates suggest that in 1997, there were 1200-1500 deer farmers holding 220,000 to 250,000 deer, of which Fallow and Red deer represented about 45% each, with the two tropical species Rusa and Chital deer making up the remaining 10%.

Until the early 1990's the rate of the annual increase in the number of farmed deer was up to 25% but after 1993 this rate of increase fell to probably less than 10%.

Statistics compiled during 1997 to 1999 [86] suggested that in 1997 there were approximately 188,000 deer in Australia. Fallow deer comprise about 49% of this total while Red deer and Red deer hybrids comprise about 39%, Elk/Wapiti about 3%, Chital about 2.5% and Rusa 6.5% respectively.

The main reasons for the decline in the deer herd were: (i) severe drought conditions affecting eastern Australia during 1993-96 (in some areas the drought lasted until 1998) forcing farmers to destock and (ii) the consequent slaughter of large numbers of breeding females.

With the development of strong overseas markets for venison (RIRDC funded venison market development program) and velvet (Australian Deer Horn and Co Products Pty Ltd) and prospect of better seasons ahead trends, were significantly reversed.

Revised industry estimates suggest that in June 2002 [86] the population of deer in Australia remains constant at approximately 200,000 deer. Fallow deer make up about 34% of the total population and Red deer, Rusa, Chital and Elk are estimated to make up about 39%, 15%, 4% and 7% respectively.

Expansion of Australia's deer industry production base is still the major factor that will influence the long-term future of the industry.

### **Quality Assurance**

The future of the Australian Deer industry is inextricably linked to its quality assurance program and will increasingly contribute to either positive or negative perceptions and images of the industry in all markets.

The Australian Deer Industry Quality Assurance program provides industry with an ability to manage, proactively and responsibly, expectations of governments and assist in the management of industry animal health and welfare issues.

### **Investment and Economics**

To prepare estimates of likely returns from deer enterprises requires access to information that is objective, factual and supportable. Any worthwhile analysis of the performance of livestock enterprises must be based on accurate, accessible and timely records.

There are no right answers. Outcomes for any enterprise budget are based on income, expenditure and production parameters used for a particular situation.

The Australian Deer Industry Manual No.1 - Investment and Economics, is specifically written to provide people with guide budgets that show predictive estimates of outcome for the 'average' enterprises described.

Budgets developed to assess the likely outcome for an enterprise should not be based on the best or worst case scenario but on the likely outcome from average income, cost and production parameters developed from appropriate historic records and reasonable future estimates.

Individual budgets should be closely scrutinised by users to determine usefulness for a particular situation and to ensure any comparison between enterprises is valid and includes the same range of production, expense and income parameters.