

# THE AUSTRALIAN DEER FARMING INDUSTRY – ISSUES AND PROSPECTS IN 1991

A.W.English



## Introduction

Deer farming is no longer a new industry in Australia, with the first commercial deer farm established in Victoria in 1973 (Taylor 1984) and farms in most states by 1978 (English 1984). After more than a decade of high demand for breeding stock, and consequently high prices for female deer, the industry is now at a crossroads. For a variety of reasons, there has been a sharp drop in both the demand for and value of breeding stock, and the industry must now concentrate on the economic production of venison and by-products, and the promotion and marketing of these. This paper will review the situation in 1991.

## The Australian industry

a. *Deer numbers.* The number of farmed deer in Australia in 1984 was estimated to be about 20,000 (English 1984), and by 1990 this had grown to 103,000, with about half being fallow deer (Coombs 1990). It is acknowledged that these estimates are likely to be below the actual number of deer in Australia, on holdings of all sizes from large commercial farms with over 1500 deer to many hobby farms with less than 50. Nonetheless, the 1990 figure does provide some basis for a comparison with New Zealand, where there are about 1 million deer on farms in 1991. The Australian deer industry is in fact about the size of the New Zealand industry 10 years ago. Coombs (1990) has estimated that the Australian herd will be almost 200,000 by 1993, with an annual growth rate of 23%. He has noted that there was a marked change in the proportion of red deer in the Australian herd, rising from about 24% in 1986 to over 40% in 1990, due largely to the importation of about 7,000 animals from New Zealand over the last 2 or 3 years.

To place deer numbers in Australia in context with the other livestock industries, the following figures are of interest for 1988 (Castles 1990): cattle, 21,851,000; sheep, 152,443,000; pigs, 2,706,000. Deer farming is indeed a small industry, even though it is firmly established and no longer a "sunrise" industry. The implications of this latter statement will be examined below, when consideration is given to the funding of research and development, and promotion of the products of the industry.

b. *Industry structure* The Australian industry is still based on a farmer organisation in each state, each of which sends delegates to a national body, the Deer Farmers' Federation of Australia (DFFA). There has been a degree of disunity over a number of years, with both New South Wales and Tasmania withdrawing from the DFFA for a period. Nonetheless, all states are represented in 1991, and the activities of the DFFA have been strengthened by the appointment in 1990 of an Executive Director.

A further new initiative in the last 2 years has been the formation of breed societies in Australia – the Red Deer Society of Australia Inc. (REDS) and the Australian Fallow Deer Society (AFDS). The extent to which these organisations will impact on the Australian scene is still largely to be determined, but as they now send delegates to DFFA meetings there is every opportunity for them to participate effectively in debate and policy making

at national level.

It is increasingly difficult to derive a figure for the number of deer farms in Australia, with many deer owners not members of farmer organisations, and therefore not picked up by any formal census (only South Australia has a statutory registration system, following the tuberculosis incident there in 1985). It is possible that there are over 1,000 deer farms in Australia in 1991, compared to about 300 in 1984 (English 1984). This figure does not take into account the difference between deer farmers and deer owners (sometimes called fanciers). By comparison, in 1988 there were 22,121 sheep/cereal grains farms in Australia, 22,246 sheep farms and 16,857 meat cattle farms (Castles 1990).

c. *Venison production.* Reliable information on the quantity of venison produced in Australia is equally hard to obtain. In a survey of the industry conducted in 1990, Coombs established that the number of deer officially slaughtered in licensed meatworks had varied quite significantly from year to year, with 4,153 killed in 1988 (about 6% of the national herd), falling to 4% in 1989. He further noted that there is reason to believe that up to 50% of slaughterings are done outside licensed meatworks – including some hunter-killed hog deer in Victoria and fallow deer in Tasmania. The official figures for venison killed in Australia were 193 t in 1988 and 168 t in 1989. It is worth noting that 161.8 t and 246.4 t were imported from New Zealand in 1988 and 1989 respectively, representing about 60% of the venison consumed in Australia (Coombs 1990). The 1989 kill of red deer in New Zealand was 100,000, and in 1990 was about 123,000 (78,000 stags and 45,000 hinds). There is a projection for a kill of 400,000 by 1993 (Hutching 1991).

The Australian production of beef in 1987/88 was 1,537,000 t, with 589,000 t of mutton and lamb. This represents 6.9 million cattle and 32.2 million sheep and lambs slaughtered for human consumption in that year (Castles 1990). In this context, the production of something under 200 t of venison is a minuscule contribution to red meat consumption in Australia.

d. *Velvet antler and other by-products* Statistics on the production of velvet antler in Australia are impossible to obtain, given the lack of an organised system of production and marketing. With a mixture of a pool system in some locations and individual farmer's sales it is not feasible to estimate the volume or quality (as measured by price received) of velvet antler produced in Australia. In a first attempt at a DFFA-sponsored velvet pool in 1990, 970 kg was received for sale, and graded to New Zealand standards, but it is impossible to know what proportion of the season's cut this may have been. With velvet prices so susceptible to international factors beyond the control of the producer, the long term future for velvet antler production is less easy to predict than is the future for venison, and this is just as much the case for the other by-products. There is a small local market for deer skins in the leather clothing industry, but this has yet to achieve volume sales of any consequence.

## **The issues in 1991**

a. *Fall in livestock values.* There are a number of issues which can be addressed, but of paramount importance to producers is the precipitous fall in the value of female breeding stock which has occurred over the last 2 years. This has to be considered in relation to

the very high prices which were paid for stock in the preceding decade, at a time of buoyant demand for deer of almost any quality. It was clear to an informed observer that long term projections on profitability based on such live sales were certain to be flawed. Using the price of a fallow doe as a benchmark, the sales which were achieved in the \$1500–1800 range were obviously totally unrelated to the venison–producing capacity of the animal as a breeding unit. Many purchasers of such stock were severely disadvantaged by the drop in both the demand for and price of breeding stock which occurred in 1989/1990, with the fallow doe price now in the \$300–500 range in most cases.

The reasons for this quite sudden change in the situation are a matter for some speculation, but it seems reasonable to assume that the recessionary nature of the Australian economy has had no small effect – there is no real reason why deer farmers should escape the problems encountered by almost all other primary producers. The continuing sluggish local demand for venison must be viewed in the same context, with a continuing emphasis on the local restaurant trade at a time when the catering industry is itself in some depression. Recent small initiatives aimed at export markets are a symptom of this, but until the local deer industry can provide and sustain a significant volume of high quality venison there is little point in seeking to develop export markets on a long term basis.

The importation of red deer from New Zealand was seen by some local farmers as a factor in the decline in interest in local stock – particularly fallow deer. Given a perception that red deer are a preferred dual purpose farm species, this may have been partly true. As long as velvet antler is considered to be a worthwhile component of deer farm production, there will continue to be an interest in red deer and hybrids. In addition, there will be interest in the use of genes from "superior" red deer of European origin to upgrade velvet production in this country, with a small stud component now a feature of the local industry. The extent to which these studs are successful is still to be determined, as is the extent to which clk hybrids are used for the same purpose.

b. *Venison marketing.* One of the key issues in the local venison market is the continuing inability of the local industry to displace the New Zealand venison which is coming into Australia. It was reasonable to assume that this would be possible in due course, with the imported venison being seen by most as a positive element in developing the demand for venison in this country, while local supply was limited. In the event this displacement has not occurred, due to the strength of the Australian dollar against the New Zealand dollar, and the very professional efforts of the New Zealand marketers. There is no basis for accusations of dumping of venison from New Zealand – there has to be a realistic appraisal of the lack of an organised system of venison production and marketing in Australia. This was seen as the most important task facing the Australian industry over 6 years ago, and there has been little discernible progress since then (English 1984).

Whatever the mix of reasons which has resulted in the drop in livestock values, it is now essential to accept that the high prices of the past will not return, and neither should they. The current prices are much closer to parity with the real worth of the animals as breeders, in a system which produces venison and by–products in the most economic way. Furthermore, there should now be the opportunity to attract new people to the industry, and in particular to attract existing livestock farmers who are seeking genuine

diversification. It is only by doing this that national production levels can be increased to a point where we can seek and sustain export markets of any consequence. The promotion of venison, and the development of new markets, both here and overseas, are hindered by the lack of a mechanism to obtain the necessary funding to undertake these tasks.

*c. Funding of promotion and research.* After more than 15 years of operation, the Australian deer farming industry still lacks a means of generating funds for the promotion and marketing of venison, and for the development of a rational and cohesive research and development policy. With the exception of South Australia since the TB incident, there has been no mechanism by which funds are collected from producers or marketers, other than by annual subscriptions to associations and by voluntary levies and donations. The former can never generate a substantial surplus over operating costs, and the latter are at best sporadic and unreliable. Nonetheless, it is noteworthy that the Deer Research Unit at Sydney University was established in 1979 with strong support from the New South Wales Deer Farmers' Association, and research at the Unit has been supported by donations from that and other state associations, and by contributions of funds, stock and labour by individuals.

As the industry developed in the 1980's it became clear that there was a need to derive funds on a more equitable and predictable basis – especially for the promotion and marketing of local venison. The primary funding agency for production research (The Rural Industry Research and Development Corporation – RIRDC) was initially prepared to provide modest funds for research without matching funds from the industry, and it was possible to conduct research relevant to the developing industry. However, it eventually came to the stage when RIRDC expected the industry to provide substantial matching funds before it would continue to support research projects, and there was no mechanism for collecting or generating such funds. In the event, considerable time and resources were expended in 1989/90 in attempting to set priorities for deer research in Australia, and for the development of worthwhile research programmes, only to have RIRDC finally rule that the lack of industry funds was unacceptable anyway.

As a result, in 1990 the DFFA and RIRDC established the Deer Advisory Sub Committee, with a primary function being to establish priorities for the allocation of funds which would be derived from a proposed new levy on livestock on farms. After much discussion within the industry and the relevant authorities on how well this levy would work, and on how the money it generated was going to be utilized, the proposal was finally dropped in early 1991 in favour of a levy on slaughterings, and possibly on velvet sales. This form of levy will generate very modest funds in the foreseeable future, with no prospect of substantial amounts being available for either promotion or research – whether the latter be production or market based. There is perhaps no better indicator of the political and organisational immaturity and disunity of the Australian deer farming industry than this failure to put in place a system for generating funds for promotion and research. It is difficult to see how the DFFA Venison Promotion Committee (or any other similar agency) can function without reasonable funding, just as the continued viability of deer research facilities is threatened by lack of resources. There is a strong base of committed and dedicated members of the deer industry in Australia, with the biggest challenge of all being the establishment of a cohesive and single-minded structure at the national level. Whether this is to be a refinement of the present arrangements or a totally new structure

remains to be seen, but it is critical that such a new order be developed in the very near future, if the industry is to thrive and develop to its undoubted potential. The most recent initiative has been the employment of consultants by RIRDC to examine the whole question of venison production, promotion and marketing in Australia. Any recommendations flowing from their reports should be available in 1991.

d. *Other issues.* Compared to the above matters there are no other issues of real consequence. It is possible to list several for completeness however:

(1) *Imports of deer into Australia.* Apart from the perception mentioned above about the effects of deer imports on breeding stock prices in Australia, there have also been concerns expressed about the degree of risk of introducing diseases with these deer – specifically TB and the tissue worm *Elaphostrongylus cervi*. There is no evidence that any such disease has been introduced in imported deer (several animals infected with *E. cervi* were detected in quarantine), and in fact the number of deer coming into Australia in future will be much reduced, given the lower prices being obtained for all but superior stud animals.

(2) *Animal welfare.* The animal welfare aspects of deer farming have been largely resolved – at least to the extent that producers do not compromise on accepted procedures when removing velvet antler. The debate over the supply or otherwise of the necessary drugs must be resolved, and it is an industry imperative that such inhumane practices be condemned and the people responsible prosecuted. To do less invites the attention of animal welfare organisations, with the risk of non-tariff trade barriers arising for venison in the process (English 1991).

An interest in the use of feedlots to produce venison will necessitate sensible scrutiny of the arrangements, if animal welfare is not to be compromised.

### **Deer industry prospects in 1991**

The prospects for deer farming in Australia have been given a shaking in the last 2 years, after the almost euphoria of the previous decade. Many farmers who paid high prices for their stock have found that they have not yet been able to recoup this money, especially with venison also trading rather poorly. It is fair to say that industry confidence is at its lowest point ever, with a need for strong leadership and far-sighted initiatives if confidence is to be restored.

It is worth examining global trends in meat production and consumption in any assessment of the deer farming industry. The world supply of domestic meats is approximately 135 million tonnes, of which 13 million tonnes enters international markets (Hudson 1987). The statistics are not precise, but an estimate of the world production of venison from all sources has been placed at perhaps 700,000 tonnes – about a 2 day supply (Krositz 1979). New Zealand is not in fact the largest exporter of venison, with Argentina leading in 1988 with 11,627 t and Britain second with 4,695 t. New Zealand was ninth with 1,291 t, but was in fact the main producer and exporter of farm venison. Germany was the biggest importer in 1988, with 17,431 t – almost half the world trade in venison of 34,322 t (Luxmoore 1988). Total nett trade volumes have varied around a mean of about 35,000 t annually since 1980 (Hudson 1987). Thus, Australia's production of under 200 t is indeed

small by comparison, and illustrates the difficulty of obtaining a significant proportion of world exports of venison. However, with the projected increase in our national herd over the next decade, there is no reason why such markets cannot be developed. It will require innovative and reliable marketers to penetrate these markets in the face of very professional competition, but the prospects are there. There is an even greater challenge in the short term, in increasing the consumption of local venison in Australia. Venison has a well established identity as a gourmet food, with a "food of kings" image – unlike the similarly lean kangaroo meat with its pet food image. The estimated total *per capita* consumption of red meat in Australia has fallen from 84.7 kg in 1981/82 to 78.8 kg in 1986/87, with poultry increasing from 19.6 kg to 23.5 kg (Castles 1990). This trend has been seen across the developed world, as consumers have been influenced by links between red meats (especially those high in fat) and health problems – especially cardiovascular disease.

It is essential that the leanness of venison be emphasized in local marketing programmes, especially when increasing supply permits retail sale of fresh venison. In the meantime, there is the need to displace New Zealand venison in Australian hotels and restaurants. There is no reason why the Australian industry cannot produce venison of comparable quality, and in fact the greater number of species being farmed here should permit better all year round production, compared to New Zealand with its reliance on deer of temperate origin. The current problems of fluctuation in supply of venison of high quality, and a lack of professionalism in much of the marketing are factors which see Australian chefs continuing to seek New Zealand venison. The extent to which DFFA proposals to include venison in the AUSMEAT system succeed in influencing these matters remains to be seen.

The velvet trade has been a smaller but significant part of Australian deer farming, and it is more difficult to make projections on future prospects. In general, the quality of Australian velvet has been criticised in comparison to that from New Zealand – such criticism stemming not from the inherent quality of the deer but from the way in which the velvet is cut and presented. While some Australian producers do cut velvet of high quality, and sell it readily, it is probably valid to state that there is room for considerable improvement. This is entirely an education process, with sufficient experience both here and in New Zealand to ensure that there is no excuse for offering sub-standard velvet for sale.

With these prospects there seems no reason for abandoning the optimism of recent times, in the face of short-term difficulties. Deer farming may not be quite the panacea for all the ills of rural Australia which some supporters would wish to be believed it was, but it can be a profitable enterprise which meets all reasonable expectations, including the opportunity to work with a most fascinating animal. Deer farming is here to stay, with the actual structure of the industry and its support base being now a matter of some urgency and concern.

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