Marketing Kangaroo Meat from the Sustainable Wildlife Enterprises

*The Conservation Dimension*

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RANGELAND AND WILDLIFE SYSTEMS
Marketing Kangaroo Meat from the Sustainable Wildlife Enterprises:
The Conservation Dimension

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Foreword

The Australian rangelands are generally considered to be those land areas where the principal land use is pastoral including the grazing of sheep and cattle, and with limited cropping potential.

The Maranoa Wildlife Management Conservancy (WMC) covers a group of grazing properties situated in the rangelands around Mitchell in Queensland. The Conservancy has commenced the development of a collaborative enterprise between landholders to produce kangaroo meat as a Conservancy product.

Diversifying pastoral income has always been a challenge in the rangelands. The Conservancy initiative is one attempt to not only enhance the sustainability of production of traditional grazing products from sheep and cattle but also to take advantage of a national resource where the numbers harvested are currently controlled by the state.

Kangaroo numbers in Queensland are controlled through a quota system administered by the Queensland Parks and Wildlife Service (Department of Environment). The Conservancy concept fits within this regulatory context. Apart from restricting numbers and species that can be harvested, there also exists a range of animal welfare, meat hygiene and other regulations that allow kangaroo meat to be marketed and consumed in Australia as well as exported.

Commercial business enterprises based on Australian wildlife usually are associated with tight profit margins.

Exploring the potential for using the concepts of sustainable yields within a conservancy and wildlife conservation gains from management of the conservancy may result in a higher acceptability of products and enhanced marketing effectiveness and margins for kangaroo products.

This research has provided information on the kangaroo meat market in Australia with regard to strategies for market development of conservancy produced kangaroo meat and in particular an assessment of the potential badging of products with some form of environmental accreditation.

This project was funded from a special grant to RIRDC provided by the Department of Agriculture Fisheries and Forestry and is part of a wider program on Sustainable Wildlife Enterprise (SWE) Trials that enables landholders to more effectively manage wildlife populations and integrate wildlife with their property and natural resource management issues. The Maranoa WMC is one of three SWE trial sites.

The key findings have been developed from market research activities undertaken with existing and potential kangaroo meat processors, distributors and consumers in Queensland.

This report, an addition to RIRDC’s diverse range of over 1800 research publications, forms part of our Rangelands and Wildlife R&D program, which aims to facilitate a more diverse rural sector, enhanced biodiversity and innovative industries based on non-traditional uses of the rangelands and their wildlife.

Most of our publications are available for viewing, downloading or purchasing online through our website:


**Peter O’Brien**  
Managing Director  
Rural Industries Research and Development Corporation
Acknowledgments

This report is the result of the efforts of a project team constructed to fulfil the terms of reference of the study. The team comprised personnel from Agtrans Research (Peter Chudleigh ad Sarah Simpson), a market research and marketing specialist (Deborah Archbold) from Deborah Wilson Consulting Services, and a local NRM consultant (Julia Telford) who is familiar with the conservancy concept and its history.

The authors would like to thank the following for helpful input into the project:

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Margaret Woodrow, Australian Wildlife Services

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Abbreviations

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<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>ALMS</td>
<td>Australian Land Management System</td>
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<tr>
<td>DMP</td>
<td>Damage Mitigation Permit</td>
</tr>
<tr>
<td>EPA</td>
<td>Environmental Protection Agency (Queensland)</td>
</tr>
<tr>
<td>QDNRW</td>
<td>Queensland Department of Natural Resources and Water</td>
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<tr>
<td>QDPIF</td>
<td>Queensland Department of Primary Industries and Fisheries</td>
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<tr>
<td>MDLA</td>
<td>Mitchell &amp; District Landcare Association</td>
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<tr>
<td>SWE</td>
<td>Sustainable Wildlife Enterprises</td>
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<td>WMC</td>
<td>Wildlife Management Conservancy</td>
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Executive Summary

What the report is about
This report focuses on the markets for products labelled as originating from sustainable enterprises where biodiversity has been enhanced. In particular, market research has been carried out within the study in order to assess and facilitate the development of a marketing strategy for kangaroo meat emanating from land and wildlife managed by the Maranoa Wildlife Conservancy.

This research report provides information on the kangaroo meat market in Australia with regard to strategies for market development of Conservancy produced kangaroo meat and in particular an assessment of the potential badging of products with some form of environmental accreditation.

The research is important for three reasons. First, the current marketing chain has evolved over a number of years using the kangaroo resource without much regard to its interaction with land management. Second, a key question in the minds of the Conservancy representatives was whether environmental badging could be applied in the market place to attract increased demand for kangaroo products. Thirdly, this increased demand would in turn assist the rural sector to diversify, especially in the rangeland areas where new production options are limited.

Who does the report target?
The report was commissioned to support Sustainable Wildlife Enterprise (SWE) Trials, which are testing new and different ways to more effectively integrate sustainable use of wildlife into natural resource management. The aim is to encourage greater use of wildlife species, which are adapted to the Australian environment and conditions, to improve the reliability and quality of supply of products and services, including tourism, while at the same time improving outcomes for wildlife. In this case the SWE trials are testing whether commercial kangaroo utilisation can act as an incentive to landholders to restore on-farm habitat.

In particular, the report is directly targeted at those in the Mitchell and District Landcare Association who are pursuing the Conservancy concept and who have already purchased two chillers to enter the kangaroo marketing chain. However, the report will probably be of interest also to other groups involved in SWE trials.

Background
The Maranoa Wildlife Conservancy has been formed under the SWE trials by a group of pastoralists, predominantly cattle producers in central/southern Queensland. The landholders involved already had exhibited a “Landcare ethic” and had been undertaking catchment planning.

A key area for improved management of the Conservancy is to focus on general sustainable management within each of the properties. Maintaining an appropriate balance of traditional livestock and kangaroo populations is paramount. Conservancy members should view kangaroos predominantly as a resource that can be utilised for both economic and biodiversity reasons, rather than merely as a pest.

Some kangaroos are harvested within the Conservancy at present (some for human consumption and some for pet food) under a regional quota system as for other areas in Queensland. Other kangaroos and wallabies are harvested under a damage mitigation permit (DMP). Kangaroos shot under a DMP are not allowed to be taken from the field after they are shot, but skins can be taken.

The objective of the Conservancy is to promote biodiversity through:
- land, vegetation and animal stewardship at both individual property and Conservancy/catchment scales
- wildlife management through protecting and enhancing the habitats of existing wildlife and potentially through re-introduction of native species
• sustainable commercial livestock management
• sustainable kangaroo management including sustainable harvesting rates and utilising sustainable harvesting practices.

While other market research activities on kangaroo meat have been undertaken in the past, information on the potential for differentiation of the market through environmental management associated with the kangaroo production and harvesting system and its interaction with traditional grazing enterprise was lacking.

Objectives
Specific objectives of the research were:
• Identify the size and location of markets for produce from Wildlife Management Conservancy enterprises that are badged as leading to a net conservation gain.
• Support the establishment of processes for supplying those markets.

The principal beneficiaries from the research are those supporting the establishment and development of the Maranoa Conservancy Group, as well as other like minded groups of landholders who may be developing similar concepts in environmental management.

Methods used
The first activity concentrated on describing the characteristics of the Conservancy properties, the potential supply of kangaroo meat, and features of the Conservancy properties that were thought would be of interest to current and potential kangaroo meat consumers. This guided the second activity, appropriate market research with consumers and other participants in the kangaroo marketing chain (e.g. marketers, restauranteurs, caterers etc). The information attained on the market was expected to lead to options for market development and in particular alternative forms of potential badging of products, for example, using some form of accreditation or chain of custody associated with environmental and wildlife management systems.

The market research consisted of two major activities:
(i) Twenty one interviews with representatives of various segments of the market to provide feedback on opportunities for the Conservancy product. This covered food service suppliers, gourmet retailers, supermarket representatives, restaurants, catering organisations, hotels, and processors.
(ii) Two focus groups including one focus group of 10 people that had eaten kangaroo four or more times in the last 12 months; and one group of 9 people that included 4 that had eaten kangaroo at least once and 5 people that had never eaten kangaroo.

Key findings
The key findings have been developed from market research activities undertaken with existing and potential kangaroo meat processors, distributors and consumers in Queensland.

Sustainability
There are many activities that could be undertaken on Conservancy properties to improve the sustainability of traditional livestock management systems. Some of these activities interact with kangaroo harvesting. The Maranoa Conservancy is already progressed to the stage where a number of landholders have been accredited under the Australian Land Management System. Various types of improvement to wildlife management are possible on Conservancy properties. One method would be integrating current kangaroo harvesting more closely with property management of both wildlife and traditional grazing management of sheep and cattle. There may need to be a financial incentive to enhance this integration and this incentive could be attracted in various forms. One avenue by which this may come about is through improved quality of kangaroo meat production, and marketing the Conservancy product as a conservation gain product.
Conservancy supply

An estimate of harvest numbers from Conservancy properties is 7,000 to 10,000 head per annum. While this is only a rough estimate, it is a very small number compared to the whole of Queensland or the Australian annual supply of kangaroo meat, with 4 to 7 million harvested each year. Consistency and continuity of supply from the Conservancy may therefore be key issues in market development.

There may be a need to take kangaroo carcasses from other conservancies with similar credentials (if they exist), or from non-conservancy properties with potential credentials. As mentioned earlier, the main reason that the Maranoa Conservancy was established was because of the “Landcare ethic” of the landholders involved and the catchment planning they were doing focusing on other values and threats in their region. Since that time two other groups in the Mitchell area have commenced similar discussions, so it is possible that they could also be included in the Conservancy if they undertake subcatchment planning with their neighbours.

It is likely that more properties in the area would supply if it could be demonstrated there was a price premium to be captured, for example, if a processor could pay a premium for Conservancy kangaroos.

Apart from total quantity available, continuity and the variability of supply may be key issues in marketing a Conservancy branded product. Strategies for maintaining a continuous supply or at least reducing supply variability may include one or more of the following:

- Managing the kangaroo population on a whole area of Conservancy basis.
- Reducing sheep, cattle (and in some cases goat) numbers in drought periods.
- Utilising smaller kangaroos (and possibly wallabies) and supporting the meat price to processors/marketers through a reduced price for larger carcasses.
- Limiting the meat sold under the Conservancy brand in periods of ample supply so that expectations for supply continuity were not high, and with surplus kangaroo meat sold generically.
- Form marketing alliances with other like-minded Conservancies, preferably in other regions so that some form of spatial diversification were in play that may reduce variability.

Findings from Survey of Firms

The potentially small volume of the Conservancy branded product and any problems with stability of supply will affect opportunities to supply the product into some firms and some segments. The hotels and supermarkets contacted confirmed that lack of continuous supply would be a barrier to using the product. Some of the firms in other segments would not be interested in the product if supply is not reliable or consistent.

Sixteen of the 19 firms surveyed were interested in trialling the product or in receiving more information on the product but the final decision to use the product would be based on a range of factors including quality, price and perceived demand. Two firms were not interested in the new product and one could not comment until they received more information.

When asked to rate the strength of the opportunity for the Conservancy product in the market (on a scale of 1 to 5 where 1 is poor and 5 is very good), food service companies gave the highest rating (3.5) followed by hotels (3.3) and supermarkets (2.9).

Food service companies (including game meat suppliers to high quality restaurants and gourmet butcher shops) felt that there is potential interest in the product. Demand for game meat is ‘fashion’ influenced. For this reason, the new product would need to be supported by a concerted promotional campaign targeting chefs (e.g. chef workshops such as G’day Chef and targeted marketing) to encourage trial of the product. Consumer demand is seen as a key driver and promotion to consumers is also needed.

Restaurants gave a rating of 2.0 out of 5 to the market opportunity. While some were interested, others were not interested in the product. Significant differentiation on quality and presentation would be needed. Successful branded products used by restaurants include Meat Standards Australia (MSA) and other high quality branded meat. Junee Lamb has developed high quality packaging for restaurants.
and this approach has lifted demand. Kangaroo is currently supplied to restaurants in clear plastic, bloody bags and can be much less appealing. Overall, the current presentation of kangaroo product to restaurants and food service outlets was considered fairly basic and sends the message kangaroo is just a commodity product. Information from other sources suggests there could be room for expansion into the domestic restaurant trade.

Hotel interests felt that there is potential demand for a high quality, environmental branded product (rating of 3.3 out of 5). As with the restaurant segment, promotion to chefs and marketing the product as a gourmet product is important.

For some firms, the environmental focus is valuable due to the positioning of the business or because of increased interest from consumers. However, the Conservancy product would need to be positioned primarily as gourmet and secondly as an environmental brand. Those who did not see value in the environmental branding believed that the current supply of kangaroo already has good environmental credentials. Others felt it would be too difficult to differentiate the new product from the existing supply of kangaroo.

Clear messages are needed about the differences the new product offers. To achieve wider levels of interest and support, the quality and gourmet positioning will be the main drivers. Few are interested in a product that is differentiated only by the conservancy approach. Also, the environmentally branded product must be demonstrated to be superior in quality and packaging. Regarding quality, tenderness and food safety were considered paramount.

Of the 19 firms surveyed 18 indicated that they would be willing to pay a higher price for the environmentally branded product. However, the actual price of the product would be determined by the quality of the kangaroo meat. All segments reported that the Conservancy product initially should have a similar pricing to existing kangaroo and, once the product is established and successful, the price could be gradually increased.

Businesses purchasing environmentally branded kangaroo want information on how sustainable harvesting is managed, credentials of the supplying organisation, firm ownership, food quality and system capabilities – a full profile on the operation, its capabilities and the benefits it can deliver. These firms felt that consumers would want information on the origin of the product, nutrition and health information (confirmation that it is a healthy product), information that kangaroo is tender and of good quality.

**Findings from Consumer Focus Groups**

Notwithstanding that there is little interest in product differentiated on conservation grounds, the key proposition conveyed to the Focus Groups was that landholders will carry out enhanced habitat protection and control of invasive species that diminish biodiversity or reduce damage to land as a result of better management of the kangaroos and traditional grazing enterprises with sheep.

The Focus Group discussions revealed some difficulties in understanding the Conservancy concept as perhaps there were too many messages involved and not one issue that could be driven home. Some of the simple conservation/environmental concepts that appeared important were the maintenance of sustainable populations of kangaroos, sheep/cattle versus kangaroos, greenhouse gas production, and some concerns about shooting females and joeys in the pouch.

However, regular buyers of kangaroo meat are generally interested in the concept of an environmentally branded kangaroo product. For the majority of this group, a gourmet product positioning is essential. A few people in this regular user focus group purchase kangaroo meat because it is a cheaper meat option. Overall this group would accept a slightly higher price if they knew the product was delivering positive results for the environment and was a gourmet product. Consumers are interested in the ‘environmental story’, particularly the fact that the product is produced in Queensland by Queensland based companies.
It is important to provide an effective, succinct and positive environmental story to accompany the product. Although consumers understand concepts such as ‘organic’ and ‘free range’, consumers felt that the conservancy concept would need a simple, easy to understand definition. People did not find the concept or the benefits easy to understand. Some saw the fact that cattle and sheep production was continuing, along with possible land clearing on properties, was in conflict with the concept of a net gain to the environment. There was strong interest in the low greenhouse gas emissions from kangaroos.

The market research showed that for most consumers any animal welfare and harvesting considerations were not major and these issues are probably best left alone. However, the market research demonstrated some concern about the residual population if females were harvested, the harvesting of females with pouch joeys and any genetic implications in the longer term of harvesting the larger animals. Above all, they want to be assured of quality and food safety. The perception that kangaroo meat is dog food or pet food is not a positive association for promotion as gourmet product.

Both regular and infrequent users of kangaroo are interested in information on cooking methods for the best eating result and recipes using kangaroo. Consumers identified opportunities for use of ‘bush tucker’ complementary spices and food products (e.g. marinades, sauces) that could be sold with the Conservancy kangaroo.

**Implications for marketing**

**Positioning**

The Conservancy product would best be promoted as a gourmet and environmentally branded high quality product; use of all three themes would be vital in the positioning of the product. The environmental brand would need to be simply communicated.

Establishing a niche product within a niche market (existing kangaroo supply) was seen as a difficult task. Some firms felt that there was still limited demand for kangaroo at the present time and that considerable marketing effort would be required to create consumer demand (considered essential for long term success) and market the new product to different market segments.

**Distribution**

Gaining market access and providing the necessary support and customer service backup required was identified as a challenge. Assuming a high quality product is produced, there would be a number of options for distribution and marketing. The business model chosen would depend on the extent of product differentiation envisaged, resources available to the Conservancy and the attitude to risk. Forming a marketing relationship with one processor would have the advantage in the short term in that there would be an established market for the product while matters of harvesting organisation and chiller management are developed. The Conservancy could gain knowledge about the market and the potential market positioning of its product. Also, a single processor is more likely to commit to a new product with appropriate promotional and educational support.

On the other hand a single processor may be more interested in securing access to a high quality product for existing markets rather than developing the market for a new product. While a small premium may be paid for quality in the first instance, this premium may never attain a high level if the Conservancy product is not well differentiated in the market place. The Conservancy product would then most likely be sold into the mass market for kangaroo meat (e.g. supermarkets). Some processors may be more concerned about maintaining throughput in the processing facility in order to cover fixed costs, rather than developing a premium price in the market place through packaging or promotion. The possibility remains of a joint market development effort by the Conservancy and the processor.

A second option may be to make the product available to more than one processor, with preferences given to processors or marketers with ideas for promotion as coming from a conservation gain production system.
Depending upon the availability of product, and once some security of supply and quality has been obtained, it may be then viable for the venture to target smaller volume, high value markets. However these market segments are ‘unforgiving’ in terms of their expectations of quality, consistency and availability of supplies. One option may be to pay for carcasses to be processed under contract and then market the processed cuts directly to an up-market food service firm that may supply restaurants or a game meat specialist distributor. Exclusive supply arrangements to game meat suppliers in some states could also be considered.

In all of these options, it may be possible to obtain a government grant to help develop the packaging, promotional material, and implement promotional activities, possibly in conjunction with the existing distributor.

Quality
A very high quality product was considered essential to penetrate all markets, but particularly the restaurant market, gourmet butchers and game meat specialist distributors.

The Conservancy could improve the arrangements around product integrity. Currently, it is understood there are no formal supply chain agreements within the kangaroo marketing chain. It is possible that product quality could be improved from the shooting and field harvesting, handling to the chiller, chiller management and then transport to the processor. This may involve for example, use of bar codes and temperature scanning devices. There is currently a code of practice for chiller management but some industry opinions are that this area of the supply chain could be significantly improved.

An issue associated with improved chain management is whether improved quality means a higher cost of supply (e.g. harvesting or chiller costs) and whether there are low cost areas of improvement that can be made. Stacking and spacing in chillers appear to be an important issue as there is a need to cool carcasses down quickly but this is not possible when chillers are full. Choices need to be made therefore between smaller or larger chillers and their number and location, regularity of emptying, single or double hanging etc. The cost implications of all such changes require estimation. Also, it would be important to assess how quality could be improved by implementing changes in terms of less wastage or improved eating quality.

Pricing
The strategy of developing the market for the Conservancy product at existing prices and then gradually increasing prices once a market niche has been developed is favoured. The potential for increasing prices to domestic consumers and to the export market is presumed to be limited in the short term. The Conservancy product has first to be differentiated and proven in terms of quality, food safety and environmental credentials. Only then would significant price premiums be likely to be extracted from processors or other distributors.

Supply variability
Maintaining stability of supply was generally important for consumers and for each of the market segments. A seasonal downturn would be understood by consumers; however patchy supply would result in consumers not consistently coming back to the product.

Promotion
Consumer acceptance of kangaroo is growing. However it is regarded as a niche product and consumers do not have a great deal of understanding of this product, particularly as a high quality gourmet product. Consumer education, in store demonstrations and promotion or endorsements of the product by chefs needs to be undertaken to appropriately position the product.

Developing effective packaging and a recognisable, attractive branding for the product would be recommended. It will be important to provide leaflets for recipes when targeting consumers and provide the necessary information on the product when targeting key market segments, e.g. quality, food safety and the Conservancy message.
Conclusions and recommendations

1. There are four major conclusions relevant to the Conservancy pursuing any market development through a branding and promotional strategy:

   (i) Environmental management as a concept in kangaroo meat marketing has some potential but the conservation gain concept is difficult to address in a manner that can easily be understood and believed. This remains a challenge for the Maranoa Conservancy Group.

   (ii) Environmental credentials are not sufficient on their own to develop a market niche for the Conservancy product. Meat quality and integrity are very important and there need to be reasons provided as to why the Conservancy product is higher quality than the rest of the kangaroo meat in the market.

   (iii) Given the likely Conservancy supply, the product would need to be positioned as a gourmet product at the top end of the market including such market targets as restaurants and gourmet butchers. One distribution channel to facilitate this would be through game meat specialist distributors.

   (iv) Significant promotion and packaging innovation would most likely be required to develop a niche market.

2. The difficulties and risks, time and costs for development of a niche market should be recognised. It is questionable whether the Conservancy could raise the resources required (in the hundreds of thousands of dollars) for this market development unless there was some partnering with existing players.

3. Supply variability will be a constraint in market development, mainly in gaining the required support from within the distribution system. Potential multiple strategies to overcome some of this variability have been identified.

4. It will be important to identify where improved quality and/or cost savings/increases to the total system are likely to occur from the Conservancy operating its own chillers. There is a need to avoid pursuing a system that increases costs without net benefits. Demonstrating profitability to the overall system from changes should be given precedence.

5. It is recognised that the current marketing chain has evolved over a number of years. There will be entrenched interests, distrust and opposition to change as has been demonstrated already.
1. Introduction

This project focuses on the markets for products labelled as originating from sustainable enterprises where biodiversity has been enhanced. In particular, market research has been carried out within the study in order to assess and facilitate the development of a marketing strategy for kangaroo meat emanating from land and wildlife that are managed in a sustainable manner.

If a viable marketing strategy, based on sound market research, develops from this project, it will represent another step in the development of sustainable wildlife enterprises. This will in turn assist the rural sector with diversification, especially in rangeland areas where new production options are minimal. It could provide RIRDC with a win-win strategy of increasing profits for rural landholders but at the same time increasing environmental sustainability and strengthening the social fabric of rural areas.

The marketing study (AGT-13A) funded within the Maranoa Wildlife Conservancy project is part of a wider RIRDC project on trialling three sustainable wildlife enterprises. The wider project has the following objectives. AGT-13A addresses the third objective:

1. Define a framework that enables landholders to share the proceeds of harvested wildlife.
2. Estimate kangaroo numbers that enable landholders to more effectively manage populations and integrate wildlife with their property and natural resource management plans.
3. Identify markets for products that are badged as leading to net conservation gain.
4. Share information of experiences from the trial sites and encourage regional collaboration in natural resource management and wildlife planning.

The focus of the present project is on the connection between environmental management and the demand for kangaroo meat. In addressing this connection, substantial preparatory investigation has been carried out in order to ensure the appropriate questions are pursued when assembling information from the marketplace.
2. Objectives and Methods

2.1 Objectives

The broad objective of the project was to contribute via marketing and market research to a more diverse rural sector, enhanced biodiversity and innovative industries based on non-traditional uses of the rangelands and their wildlife. While the project is embedded within a broader RIRDC program aimed at trialling sustainable wildlife enterprises in several Australian locations, it is specifically associated with the development of a wildlife management conservancy around Mitchell in the Maranoa region of Queensland.

Specific objectives of the project were:

- Identify the size and location of markets for produce from Wildlife Management Conservancy enterprises that are badged as leading to a net conservation gain.
- Support the establishment of processes for supplying those markets.

The key role of the study was to identify the characteristics of markets for kangaroo meat from the Maranoa conservancy so that marketing may best proceed to capture those markets. The views of those involved in marketing and consumption of kangaroo meat were of paramount interest in order to direct the Conservancy focus, particularly the attitudes towards activities and products that are associated with ‘net conservation gains’. There was a need to explore the reaction to a conservancy or regional brand to promote the sustainable harvest of kangaroo meat from the Conservancy (and potentially any other products).

2.2 Methods

The project team was made up of Agtrans Research personnel (Peter Chudleigh and Sarah Simpson, agricultural economists), a market research and marketing specialist (Deborah Archbold) from Deborah Wilson Consulting Services, and a local Natural Resource Management (NRM) consultant with experience of the development of the conservancy and its history (Julia Telford). The first activity concentrated on describing the characteristics of the Conservancy properties, the potential supply of kangaroo meat, and features of the Conservancy properties that were thought would be of interest to current and potential kangaroo meat consumers. This guided appropriate market research with consumers and other participants in the marketing chain (e.g. marketers, restauranteurs, caterers etc). The information on the market was expected to lead to options for market development and in particular alternative forms of potential badging of products, for example, using some form of accreditation or chain of custody associated with environmental and wildlife management systems.

The first part of this report (Sections 3 and 4) has been compiled from team knowledge and reading selected material (project and non-project). The report initially focuses on the potential linkages between the sustainability and environmental credentials of the Conservancy and the market-place, with emphasis on the market for kangaroo meat. Some brief attention is given to several other potential Conservancy enterprises (non-kangaroo harvesting enterprises). A brief report on these other enterprises is provided in Appendix 1.

The key aims of the market research were to:

- Provide feedback on consumer interest in the Conservancy concept and the extent to which this would influence buyer behaviour.
- Determine the level of acceptance and interest in a Conservancy brand kangaroo product range among high quality food outlets, food service firms, restaurants, and supermarkets.
- Determine processor views on the Conservancy product.
The market research consisted of two major activities:

1. Twenty one interviews with representatives of various segments of the market to provide feedback on opportunities for the Conservancy product. This covered:
   - 5 food service suppliers
   - 4 gourmet retailers
   - 4 supermarket representatives
   - 2 restaurants
   - 2 catering organisations
   - 2 hotels
   - 2 processors.

   Interviews covered firms with operations in Queensland, New South Wales, Victoria, ACT and South Australia.

2. Two focus groups covering:
   - One focus group of 10 people that had eaten kangaroo four or more times in the last 12 months.
   - One group of 9 people that included 4 that had eaten kangaroo at least once and 5 people that had never eaten kangaroo.

   Questionnaires used in interviews with market segment representatives and the focus group questionnaire are contained in Appendix 2 of this report.

Research results provided insights into key issues affecting potential uptake of the conservancy product in various market segments. The focus group research provided qualitative feedback on attitudes to kangaroo meat and reaction to the Maranoa Conservancy concept.

A short summary of the Conservancy approach that was used to inform those surveyed or participating in the Focus Groups is included as Appendix 3 of this report.
3. Background to the Conservancy

The Maranoa Wildlife Conservancy has been formed by a group of pastoralists, predominantly cattle producers in central/southern Queensland. The reason behind the Maranoa Conservancy being established was because of the “Landcare ethic” of the landholders involved and the catchment planning they had been undertaking.

A key area for improved management of the Conservancy is to focus on general sustainable management within each of the properties. Maintaining an appropriate balance of traditional livestock and kangaroo populations is paramount. Conservancy members view kangaroos predominantly as a resource that can be utilised for both economic and biodiversity reasons, rather than merely as a pest.

Some kangaroos are harvested within the Conservancy at present (some for human consumption and some for pet food) under a regional quota system as for other areas in Queensland. Other kangaroos and wallabies are harvested under a damage mitigation permit (DMP). Kangaroos shot under a DMP are not allowed to be taken from the field after they are shot, but skins can be taken.

3.1 Conservancy Objectives

The objective of the Conservancy is to promote biodiversity through:

- land, vegetation and animal stewardship at both individual property and Conservancy/catchment scales
- wildlife management through protecting and enhancing the habitats of existing wildlife and potentially through re-introduction of native species
- sustainable commercial livestock management
- sustainable kangaroo management including sustainable harvesting rates and utilising sustainable harvesting practices.

3.2 Current and Prospective Conservancy Activities

3.2.1 Grazing Management

Improving grazing management on the Conservancy properties can interact with kangaroo management in a number of ways. There is the potential for changing the mix of cattle/sheep and kangaroos on the Conservancy properties. There is potential for there to be fewer sheep/cattle, watering points, fences etc. Also, harvesting kangaroos more strategically could allow pastures to regenerate more rapidly. Managing total grazing pressure especially in drought is a key aspect of kangaroo interaction and integration with property management.

3.2.2 Harvesting Strategies

Location and time of harvest information for each kangaroo could be integrated with information on land, pasture, weather and seasonal conditions. Kangaroo harvest data assembled on a Conservancy basis can be used for both livestock and kangaroo management. One idea canvassed was for the Conservancy to give priority to harvesting kangaroos on spelled regenerating paddocks, with harvesters being requested to harvest in specific locations on behalf of the Conservancy group. This does not happen under existing harvesting arrangements. Also, sharing information about location and aggregation of kangaroos may be beneficial to harvesting efficiency. A coordinated approach may allow better strategic control of large concentrations and easier shooting.

3.2.3 Invasive Species

The maintenance of native vegetation by control of weed spread could be improved with kangaroo harvesters washing down vehicles before entering another property and would be part of an overall environmental management plan.
Kangaroos are the most common native species within the Conservancy. However, the number of many other native species has been reduced by invasives such as wild dogs, foxes and cats, and feral pigs. There is some anecdotal evidence that there has been loss of native birdlife (plains turkeys, brolgas) as a result of increased numbers of feral animals. The situation may have been worsened by the DMPs whereby some carcasses are left to rot in the paddock. Kangaroo harvesters working within the Conservancy may be able to assist with wildlife management by shooting feral goats, foxes or cats.

If ferals can be controlled, there may be scope for reintroduction programs for native animals like the bilby program that operated at Charleville.

### 3.2.4 Greenhouse Gases

It is estimated that about 16% of Australia’s total net greenhouse gas emissions originate from the farm sector. Of this 16%, 71% is contributed by ruminant livestock such as cattle and sheep emitting methane gas. Methane is a product of ruminants, and kangaroos are not ruminants. Consumption of kangaroo meat instead of beef or sheepmeat is therefore very greenhouse friendly.

A recent report for Greenpeace on global warming stated that reducing beef consumption by 20 per cent and putting Skippy on the dinner plate instead could cut 15 megatonnes of greenhouses gases being emitted to the atmosphere by 2020 (Diesendorf, 2007).

### 3.2.5 Meat Quality

A higher and more consistent quality of kangaroo meat potentially may result from changed harvesting and handling processes, a higher level of chiller management, and an improved feedback and traceback system. An improved traceback system is currently being developed for the Conservancy, including GPS and data logging on a paddock and property basis.

Also, if kangaroo harvesting within the Conservancy is organised by a combination of pastoralists and harvesters with some form of joint control of chillers, one of the benefits may be improved quality control and an improved product to market.

### 3.2.6 Harvesting and Chiller Management

The Mitchell & District Landcare Association (MDLA) has recently purchased two chillers (one 40 foot and one 20 foot in length), both located in Mitchell. By purchasing 2 boxes it was seen as an opportunity to be able to diversify the Conservancy product over time as opportunities arise. A manager of the chillers has been appointed. MDLA took advantage of local boxes being for sale, rather than trying to purchase new boxes to be located in Mitchell. This has been seen as an easier way to enter the industry, as locally all other boxes were owned by processors.

The concept was that landholders involved in the Conservancy wanted to prove capacity initially and then look to growth, with the general agreement that there would be a need to increase supply for it to be successful and profitable in the long term.

After purchasing the chiller MDLA has continued to sell kangaroos to Macro Meats, based in South Australia. The MDLA & Macro Meats have agreed that the product will go through the processing plant, however MDLA can trade through another processor if it so chooses.

In early January 2008, with the Certificate of Trade issued by Environment Protection Agency (EPA) in Charleville, MDLA had started buying kangaroos from local harvesters. However, due to administrative issues and not having the Certificates on site, this ceased. The local harvesters have thus pulled out of shooting to the “Landcare boxes” and this has created a new round of negative feeling towards the project. As a result, MDLA is currently in a situation of having no harvesters prepared to supply the boxes. MDLA is in the process of trying to rectify this situation at least for the short term. It is another bump in the road between local landholders and harvesters since the Conservancy concept was initiated several years ago.
As a result of this latest halt to the progress of the project, there has been mixed feeling by landholders and people involved in the group. One line of thought is that landholders have a right to refuse harvesters access to their properties, unless they supply the “Landcare boxes”. This is not a view supported by everyone, as this approach is seen by some to be antagonistic, and therefore creating more disharmony and negativity towards the Conservancy.

Within the kangaroo industry there is negative sentiment towards landholders being involved in the production side of the business, with harvesters feeling threatened by this involvement. This is regardless of the fact that harvesters have not been happy with the prices imposed on them by processors, and where they have little room to negotiate.

Another project, undertaken in conjunction with landholders and harvesters, has been exploring alternative organisational structures associated with the Maranoa Conservancy (Rosie Cooney, pers. comm., 2007). This project has directed the Maranoa Conservancy towards a Cooperative structure including both landholders and harvesters.

### 3.3 Environmental Management Systems

#### 3.3.1 General
Past Australian experience with environmental management systems in improving access or extracting premiums in the market place has not been overly positive. For example, the Field Fresh Nature Conservation Project was established to encourage Tasmanian onion and carrot growers to develop a conservation program as part of the compliance with Natures Choice Quality Assurance program (Tesco Supermarket Chain in the UK). An analysis of the program showed that there needed to be a financial incentive apparent, not just market access, to avoid a significant drop out from such a scheme; the drop out quickly occurred due to the absence of any financial incentive.

A survey of 25 influencers of attitudes towards sustainability of Australian woolgrowing suggested that in the long term sustainable practices could impact on price but more likely on market access. In the short term (1-10 years), factors affecting price and market access were thought more likely to be in the areas of animal ethics and chemical use rather than biodiversity.

The issue with kangaroo meat is whether consumers are convinced there are likely to be conservation gains from the Conservancy and whether they are prepared to pay a higher price for meat originating in the Conservancy. It is possible that meat quality may be a stronger driver for differentiation.

#### 3.3.2 Environmental Management Systems in the Conservancy
Some landholders within the Conservancy have recently been audited under the ALMS process. ALMS (Australian Land Management System) is an ISO14001 accredited EMS. At this stage there are four landholders who have been audited under the ALMS accreditation, with three landholders awaiting an audit. The two differences between ALMS and any other EMS is that it takes into consideration catchment targets/issues and it has a focus on biodiversity. No other EMS does this.

As initially anticipated there are now other landholders within the conservancy who are interested in undertaking an ALMS EMS since the first landholders began. There are three landholders at present who have said that they would like to undertake the work, with others possibly interested.

There is potential for 3rd party certification if landholders choose to become fully ISO certified. This has not been flagged as something that is of interest to landholders at present as the cost involved in getting the ISO accreditation is high, and there has been no market incentive to support this cost. To be able to say that as a result of their ALMS audit that they are ISO compliant has been sufficient.
Consumers can be confident that ISO 14001 is an internationally recognised EMS program, and that landholders who have passed the audit process are deemed to be compliant with this standard.

ALMS-accredited auditors certify that each ALMS management system complies with the internationally recognised ISO 14001 environmental management standard. ALMS members are required also to account for catchment priorities and strategies, and to provide continuous support for biodiversity conservation.

Some landholders further west of the Conservancy area have undertaken a Pastoral EMS through a project with the Queensland Department of Primary Industries and Fisheries (QDPIF). However, this project has now finished and QDPIF has approached Queensland Murray Darling Committee to work with these landholders. Some landholders have been working with AgForce on property management plans, however these are not auditable. There are no organic beef producers or organic wool producers in the Conservancy to the knowledge of the authors.

3.3.3 Wildlife Management and Planning

There is no overall wildlife management plan for the Maranoa Wildlife Conservancy as a whole. Wildlife management is currently integrated into the individual property management on Conservancy properties by highlighting high value biodiversity and vegetation corridors and managing for this, along with riparian areas.

Managing total grazing pressure especially in drought is a key aspect of kangaroo interaction and integration with property management. However, the regional quota system may mean that during droughts that quota may be reduced just when greater kangaroo control may be required. Black striped wallabies are not harvestable currently and could compensate by increasing numbers if kangaroo numbers are better controlled through harvesting, although some of the Conservancy country will not be suited to their habitat. The black striped wallabies sometimes are culled as a pest under damage mitigation permits if it can be demonstrated the wallabies are responsible for significant losses. An approximate number is that around 6,000 may be shot each year around Roma. One option is to have a small quota for them, on a sub-regional scale, to keep numbers at a manageable level.

A special case could be made for DMP carcasses to be used rather than being left to rot in the field. However, information on the size of the cuts and the quality of the meat is not available. Any market niches that may be filled would need to be weighed up against the higher processing cost per kg of carcass and the lower value of the smaller skins.

3.3.4 Potential for Wildlife Management Changes

A key idea is whether conservation based enterprises can act as an incentive to retain and restore on-farm habitat. But from where will the incentive come? The propositions raised so far include:

- the Conservancy will gain revenue from sharing in the likelihood of domestic consumers paying more for higher quality kangaroo meat
- the Conservancy will gain revenue by selling its product to processors at a premium price
- the demand for kangaroo meat increasing due to the promotion of conservation and environmental benefits and being produced under a conservation positive management system
- a perceived reduction in damage to land as a result of better management of the kangaroos
- reducing sheep and cattle numbers with commensurate increases in kangaroos populations and higher kangaroo offtake
- there could be a government incentive for innovative business ideas, ‘drought’ tolerant agriculture, etc
- a direct payment of consumers for kangaroo meat that is produced on the Conservancy with such payments being channeled directly for on-farm habitat restoration and conservation enhancement, not only for kangaroos but also for other native animals

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There would be some data available on the current native and feral wildlife on conservancy properties apart from kangaroos, but much of this may be anecdotal. Local councils would have information on wild dogs through their baiting program and bounties on dogs. This might also be a source of information on foxes and cats, and perhaps feral pigs. Such information may be helpful in ascertaining the usefulness of a higher level of feral control.

There is anecdotal evidence only of the loss of native birdlife (plain turkeys, brolgas) as a result of increased numbers of feral animals. There is potential for surveys to be done in the area to look at native species abundance. There would need to be a demand from the Conservancy for funding to be able to justify such surveys.

There is not much evidence of the impact of effectiveness of control of dingoes, cats, pigs and wild dogs on native wildlife. Wildlife management does not appear as an integrated part of property management plans within the Conservancy and this is an area that could be developed further.

There may be scope for reintroduction programs for native animals (e.g. opportunities for reintroduction of small mammals due to improved control of ferals on a Conservancy wide basis, similar to the bilby program at Charleville).

3.3.5 Harvesting Kangaroos and Wildlife and Pastoral Management Opportunities within a Conservancy

Harvesting kangaroos for use as wild dog baits has been mentioned as a tool to foster a higher level of understanding and trust between landholders and harvesters. This could apply particularly using the DMP animals that are currently killed and left to rot in the paddock. The current system encourages higher populations of feral animals as has been mentioned earlier.

Kangaroo harvesters may be used to assist with wildlife management e.g. shooting feral goats, foxes or cats. This has been a thought from the beginning of Conservancy development. With regard to weeds, harvesters could wash down vehicles before entering another property. While this may increase costs, it would provide much benefit with regard to weed spread (e.g. parthenium) and could be part of an overall environmental management plan.

Other potential opportunities and benefits may include:

- Low weight kangaroos are currently not targeted for harvesting, but if they were this may assist management of numbers.
- Harvesters may be able to purchase harvesting inputs more cheaply if member of a wider Conservancy.
- Kangaroo harvest data assembled on a Conservancy basis can be used for both livestock and kangaroo management. Location and time of harvest could be integrated with information on land, pasture, weather and seasonal conditions etc, population dynamics etc.
- Decision making tools could be developed with increased information input from kangaroo harvesters for example, on the kangaroo populations to target, management of native and exotic animals including pests, state of fences, water levels, pastures etc, managing disease etc.
- Reduction of livestock numbers if the value of kangaroo meat harvested on Conservancy properties increases; this may result in improved livestock welfare, and increased land and pasture sustainability.

3.3.6 Technology to Trace Wildlife Products and Data Management for Kangaroo Harvesting

Information is assembled manually and submitted every month to regulatory authorities by kangaroo harvesters and includes where a kangaroo is shot, its species, age, sex and weight. This is effected by harvesters in submitting their harvest information to government. The chiller managers record the number and species at the point of sale, but presumably property level details are lost at this stage.
An improved traceback system is currently being developed for the Conservancy, including GPS and data logging on a paddock and property basis with chain of custody at least to the processor (and possibly further to market).

There has been animosity about the Landcare group getting involved in the kangaroo industry, with the current chiller operators and processors happy with the ‘business as usual’ approach, and not supportive of change which may affect their current access to resources. Thus the MDLA is seeking to work with harvesters so that harvesters have a secure supply for themselves and for the chillers. A bar coding and trace back system is still to be rolled out with harvesters.

3.4 Summary

There is a range of activities that could be undertaken on Conservancy properties to improve the sustainability of traditional livestock management systems. Some of these activities interact with kangaroo harvesting. The Maranoa Conservancy is already progressed to the stage where a number of landholders have been accredited under the Australian Land Management System. Various types of improvement to wildlife management are possible on Conservancy properties. One method would be by integrating current kangaroo harvesting more closely with property management of both wildlife and traditional grazing management of sheep and cattle. There may need to be a financial incentive to enhance this integration and this incentive could be attracted in various forms. Alternatives would be improved quality of kangaroo meat production and marketing the Conservancy product as a conservation gain product.
4. Supply of Kangaroo Meat and Factors Affecting Demand

4.1 Quantity and Quality

Five species of macropod in four mainland states and two species of wallabies in Tasmania can be harvested commercially under the quota system administered by the Australian Government, with quotas set annually and with kangaroo management plans developed by each State. The Australian kangaroo harvestable population of the 3 most populous species is often in excess of 50 million and can be as low as 15 million; the total Australian quota is 10-20% or about 4 to 7 million harvested each year.

Kangaroo harvesting accounts for an average of about 57% of the quota set on an Australia wide basis. In 2002 the federal government announced a 25% increase in the national kangaroo cull; this was an extra 1.5 million head (total of 7 million could be culled). At that time in Queensland numbers were at their highest in 20 years and the Queensland quota was 2.4 million. The actual Queensland harvest was about only half this quota. In 2006, the mainland quota was set at 3.8 million head (15.5%) due to the drop in the kangaroo population due to the drought.

The Queensland quota is usually set between 10-20% of the estimated population for each of the three species that can be harvested in Queensland; the quota is set for each species within each of three regional zones. Usually at least 1 million head are harvested in Queensland with the harvest reaching over 2 million in some years.

The 2007 quotas for Queensland are:

<table>
<thead>
<tr>
<th>Species</th>
<th>Central zone</th>
<th>Eastern zone</th>
<th>Western zone</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red kangaroo</td>
<td>618,403</td>
<td>9,648</td>
<td>30,684</td>
<td>658,735</td>
</tr>
<tr>
<td>Eastern Grey Kangaroo</td>
<td>879,596</td>
<td>159,822</td>
<td>0</td>
<td>1,039,418</td>
</tr>
<tr>
<td>Wallaroo</td>
<td>237,503</td>
<td>26,210</td>
<td>9,483</td>
<td>273,196</td>
</tr>
</tbody>
</table>

(Source: Queensland EPA)

The Maranoa Conservancy falls into the central zone of Queensland for quota purposes. An additional number of kangaroos may be culled under damage mitigation permits, as discussed earlier.

The total quota for the Central Zone in 2007 was 1.74 million. Up to 21 December 2007, the total number taken was 1.55 million (about 90% of quota).

Apart from regulations limiting the number of kangaroos that can be harvested, there are other regulations administered through a range of government agencies, codes of practice and standards including (Kelly, 2005):

- Code of Practice for the Humane Harvesting of Kangaroos.
- Standard for the Hygienic Production of Game Meat for Human Consumption.
- Standard for the Hygienic Production of Kangaroo Meat for Pet Food
- Standard for the Hygienic Transport of Meat
- Kangaroo Harvester accreditation requirements (each State has a TAFE course which harvesters must pass in order to gain licences).
4.2 Prospective Conservancy Supply

An estimate of harvest numbers from Conservancy properties is 7,000 to 10,000 head per annum. This is a very small number compared to the whole of Queensland or the Australian annual supply of kangaroo meat, with 4 to 7 million harvested each year. Consistency and continuity of supply from the Conservancy may therefore be key marketing issues.

An initial aim was that the Conservancy region would be able to have a quota allocated to itself. Investigations by the Conservancy group into State & Federal laws that impact on the success of a conservancy idea working found that not being able to have sub-regional quotas could be an impediment. To date the Conservancy group has not focused on this, as they are continuing to establish the initial stages of the project, mainly focusing on the purchasing of the chiller boxes, and the supply into these boxes. The advantages and disadvantages of securing a sub-regional quota remains an issue for the Conservancy to investigate further.

The often high number of Damage Mitigation Permits sought in the Conservancy area and the fact that the animals killed under a DMP can not be harvested was another issue that the conservancy investigated initially. A change would mean that the same number of animals would be killed but all would have a chance at being harvested for consumption. The current damage mitigation permit system is either not thought to be sufficient or landholders are not familiar with the system. The QDPIF has approached AgForce to help get information about damage mitigation permits out to their members, to which AgForce has agreed (Jo Hall, pers.comm, 2007).

In terms of managing the Conservancy offtake it is recognised that information on the average population of kangaroos in the specific landcare areas and the Conservancy properties in particular would be helpful. One activity taken by the Conservancy was to undertake an aerial count for the Maranoa Conservancy region.

The following information was recently provided to the Department of Agriculture, Fisheries and Forestry in a milestone report from the MDLA.

With support from the University of Queensland, New South Wales Department of Primary Industry and Queensland Department of Natural Resources and Water, an aerial survey with trained observers was conducted to estimate kangaroo populations and distribution for the Maranoa Wildlife Management Conservancy (WMC). Ground surveys of the Maranoa WMC were also conducted.

GIS maps that overlay kangaroo density with the properties which form the WMC have been prepared and maps showing the densities of kangaroos (eastern grey and red kangaroos) for the Conservancy are shown in Figures 1 and 2. The data show high numbers of kangaroos, with over 1 241 500 eastern grey kangaroos and over 73 341 red kangaroos in a 19 200km$^2$ area. The density on the south side of the dingo fence was particularly high with 82.36 eastern grey kangaroos/km$^2$ and 4.45 red kangaroos/km$^2$. There were lower kangaroo densities on the north side of the dingo fence with 21.73 grey kangaroos/km$^2$ and 2.29 red kangaroos/km$^2$.

The number of eastern grey kangaroos is quite substantial when compared to the average densities for Queensland’s harvest zone which are ~11.73 eastern grey kangaroos/km$^2$. Wallaroo and Wallaby densities were less significant than those of the kangaroos with 0.53km$^2$ and 0.08km$^2$ on the south side of the dingo fence and 0.83km$^2$ and 0.16km$^2$ on the north side, respectively.

Current quotas for Queensland allow a commercial harvest of kangaroos at about 15-20% of the population. Using a quota setting at 15%, the annual maximum sustainable yield (MSY) that could be achieved from the Maranoa WMC is 0.66 red kangaroos/km$^2$ and 12.35 grey kangaroos/km$^2$ on the south side of the dingo fence and 0.34 red kangaroos/km$^2$ and 3.25 grey kangaroos/km$^2$ on the north side of the dingo fence. This is quite substantial for eastern grey kangaroos as the average annual harvest rate is approximately 1.76/km$^2$. 

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Figure 1 Eastern grey kangaroo densities for Maranoa WMC
The population taken from the region in the past could be estimated using figures from the EPA. It is understood that some data is being gathered for each property regarding the numbers harvested in the past. Annual aerial surveys, involving kangaroo harvesters, Hunting & Conservation Queensland, local people, and more specific requests of information from EPA can be used to obtain improved estimates of populations and current harvests in relation to the specific Conservancy region. This information was not currently available from the MDLA.

There is an estimate of harvest numbers for Booringa shire near Mitchell of about 80,000 kangaroos per year, but numbers will vary for each year.
The accuracy of the 7,000 to 10,000 estimate for Conservancy properties is unknown. The mountain range running through the Conservancy region and the Carnarvon Ranges to the north means that a number of the kangaroo species in the region are not harvestable, as opposed to the southern half of the Booringa Shire where the majority of kangaroos are harvestable and the habitat is more suited to the kangaroos (both grey and red).

There may well be a need to be able to justify a sustainable yield each year, not just to fit in with the regional zone quota, but to demonstrate responsible management of the Conservancy by carrying out its own monitoring as part of securing a marketing advantage via increased sustainability assurance.

Monitoring yield will also provide data for management purposes e.g. management of total grazing pressure. There is some monitoring of numbers for most Conservancy properties, so improved estimates may be available in future.

The implication of these numbers for marketing is that a critical mass of product may need to be available to support a marketing campaign aimed at developing a market niche. Apart from the initial supply available, continuity of supply could be a key issue, and perhaps exacerbated by quota restrictions. Hence spatial diversification of supply may be important.

It is possible that the overall variability in supply could be reduced if Conservancy properties work together more closely. This may be so if comparisons are made with current variability from the individual properties. However, variability may increase if comparisons are made with the Central region as a whole.

There may therefore be a need to take kangaroo carcasses from other conservancies with similar credentials (if they exist), or from non-conservancy properties with potential credentials. As mentioned earlier, the main reason that the Maranoa Conservancy was established was because of the “Landcare ethic” of the landholders involved and the catchment planning they were doing focusing on other values and threats in their region. Since that time two other groups in the Mitchell area have commenced similar discussions, so it is possible that they could also be included in the Conservancy if interested. That was always the idea of the Mitchell Landcare group, that they were happy to have more landholders involved, but to be involved they must have undertaken subcatchment planning with their neighbours.

It is likely that more properties in the area would supply if it could be demonstrated there was a price premium to be captured, for example, if a processor could pay a premium for Conservancy kangaroos.

As already mentioned, another issue is whether the black striped wallabies on Conservancy properties could be harvested. There has been some attempt to secure regulation change for commercial harvest of this species in order to increase the sustainable supply of kangaroo meat from the Conservancy and to improve property management. At the moment they can not be harvested, but they can be destroyed under a DMP. This is still under investigation.

Supply could be increased if smaller animals were shot. In drought periods, there are many smaller and lighter animals that increase grazing pressure. Smaller animals have not traditionally been favoured due to their high cost of processing per kg of meat and the lower value of their skin. Processing wages are often negotiated on a per animal basis so a carcass of 20 kg is not economic to process compared with one of 60 kg. Also a significant return from a carcass is the skin. Skin buyers will allow some small skins (say 10% small) but when the proportion increases there are complaints. Skin users can do more with a large skin as it is more flexible in its end use. On the other hand cuts from smaller animals may be able to find a market niche.
4.3 Profitability and Pricing

It has been reported that the kangaroo processing industry has not been particularly profitable in the past year or so. The industry has had a tumultuous year, with adjustments in the industry, new pricing systems and tensions between industry players.

The following points are relevant to kangaroo harvesting and markets for kangaroo products in 2007:

- Higher prices were paid to harvesters for most of 2007 due to increased competition responding to the increase in product demand for human consumption over the last few years, both domestically and for export. This also had a flow on effect to the pet food processors who were chasing product share.
- There was a depressing effect on processors returns last year as the demand for Kangaroo meat met with competition from traditional meats that were able to be sourced at comparable prices.
- The increasing value of the Australian dollar had a significant impact on export pricing.
- There were inventories of other protein meats held over in some areas due to warmer than expected winter temperatures.
- While the quota has been reducing for the past two years, it has not been able to be utilised completely by the industry due to the quota input administrative processes used by the regulator in Queensland. The number of animals taken was 100,000 short of the quota in 2006 and more than 250,000 short in 2007.
- The drought has had an effect on unit processing costs as the animals presented were often of lesser weight for size.
- The small skin market has been severely depressed for a number of years, with some processors receiving invoices for the removal of ‘smalls’. Small skins are being held in stockpiles in hope of a recovery, which may occur now that the Californian market has revoked anti-kangaroo skin sale legislation.

In one area, the price reached $1.45 but generally hovered between .85c and $1.20, with one human consumption processor consistently putting pressure on prices by maintaining a 20c per kg margin over competitors.

In 2007 there was a 2 tier pricing structure set up by the processors, with animals above 16kg receiving 85c / kg and animals under 16kg receiving 40c / kg. The introduction of the two tiered pricing system for 2008 will see a higher profitability per unit cost to the processors (if there is not a propensity to harvest small animals) and a reduction of income to the harvesters. It will also probably see a reduction in harvester numbers from 2089 in 2007 to less than 1800 in 2008. If a greater accuracy in quota administration is adopted by the EPA, then the quota may be fully utilised at 2007 quota levels. It will be interesting to see if the differential pricing system is able to be maintained and what its actual effect on the industry will be.

A pressure point on the kangaroo demographics could be the harvesting of a lot more animals below 17 kg as harvesters take what they can to cover costs for the night’s harvesting. The introduction (now reversed) of the decision to restrict skin harvesting in 2008 to between May – August could have had the effect of exacerbating the situation and reducing competition to a greater degree.
4.4 Attitudes of Landholders

On the 21st of August 2007 around 60 key industry representatives, including seven government agencies, landholders, processors and harvesters and regulators attended a Queensland Macropod Industry Forum hosted by the Department of Primary Industries and Fisheries and the Environmental Protection Agency, at Charleville. Sustainability of resource was the number one priority for all involved.

As a result of the workshop held, AgForce conducted an e-survey for members to gauge attitudes regarding the kangaroo industry. AgForce was happy with the feedback they received with over 120 responses to the survey. The results are as follows:

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Unsure/No Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are kangaroos impacting significantly on your enterprise?</td>
<td>107</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Do damage mitigation permits adequately address surplus numbers?</td>
<td>86</td>
<td>23</td>
<td>14</td>
</tr>
<tr>
<td>Are damage mitigation permits easy to obtain?</td>
<td>41</td>
<td>49</td>
<td>33</td>
</tr>
<tr>
<td>Do you feel that the current quota levels are providing adequate control on Macropod populations on your property?</td>
<td>103</td>
<td>14</td>
<td>6</td>
</tr>
<tr>
<td>If a system was implemented that provided a monetary return to land holders, would you support this?</td>
<td>104</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>What possible mechanisms would you be most comfortable with in order to gain income from kangaroo harvesting?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harvesting kangaroos yourself</td>
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<td></td>
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</tr>
<tr>
<td>Receiving an access fee from harvesters</td>
<td>78</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Receiving a percentage of the income</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unsure/No comment</td>
<td></td>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>
Would your enterprise be interested in being part of a kangaroo commercial operation in your area?

Would you withhold permission to harvest on your property as a negotiating tool for landholders?

Given that around half of the respondents were interested in being involved in a commercial kangaroo operation in their area (although the majority asked for more details of the operations before they would commit (Jo Hall, pers.comm.)), the interest in landholder involvement across the state in the kangaroo industry is growing. Momentum is growing at different levels (local and state) in different states across Australia, and this is not being well received by processors (Tom Garrett, pers comm.,2008).

4.5 Market Segments

4.5.1 End Uses
On an Australia wide basis about 60-70% of carcasses taken are used for pet food with only 30-40% destined for human consumption. Of the human consumption segment, about 70% is exported; therefore only about 10% of total carcasses taken are destined for domestic human consumption (Kelly, 2005).

There were about 5,000-6,000 tonnes of meat exported each year in the early 2000s with 1.5 to 2 million skins also exported in those years (Kelly, 2005).

There is a rough estimate that the domestic restaurant sector could take one third of production of prime cuts but currently only take some 10% of prime cuts (Kelly, 2005). So it appears there could be room for expansion into the domestic restaurant trade.

There is a need for improved general information on the consumption of kangaroo meat for different end uses (e.g. fillets, rumps, sausages etc.), and yields and prices for different cuts and components of carcasses, and how these vary with size and sex of animal. Spreadsheets that represent such carcass yield information were not located but would be valuable in developing harvesting and marketing strategies.

One industry processor and marketer (Macro Meats) has pioneered a significant change in marketing of kangaroo meat for human consumption with distribution into supermarkets and to the food service industry. Health characteristics of kangaroo meat in term of its low fat content are being promoted by Macro Meats – Gourmet Game ([www.macromeats.com/aboutmm.html](http://www.macromeats.com/aboutmm.html)).

4.5.2 Consumption
The main issues that appear to be associated with low consumption of kangaroo meat are: awareness, some negative perceptions of quality, and a lack of knowledge of how to cook.

A 1997 study (Des Purcell and Associates, 1997) reported that the number of people who had eaten kangaroo in the past 12 months was 25% (66% in restaurants and 28% at home). The main kangaroo cuts were strip loin, long fillet, and rump which are all ideally suited to pan frying, barbecuing and stir frying and all optimally served medium rare. Actual cooking methods used were panfried, grilled...
and barbecued. Also the majority of people cooked kangaroo medium and well-done rather than medium rare or rare. The issue of the perception of hygiene may be one reason that leads to overcooking in some instances.

Most Australians believe that kangaroos should be harvested (increased from 75% in 1995 to 85 percent in 2005) so the anti-harvest population is only minor, but its voice is loud. It is likely that consumers worry more about health /hygiene issues, control and checks, etc and that less important in their minds are the harvesting method and the ‘Eating Skippy Syndrome’.

It has been estimated that if all animals taken were consumed domestically, kangaroo consumption would make up only 4.5% of the domestic red meat market.

In a more recent study funded by RIRDC, Ampt and Owen (2007) investigated the potential for increasing penetration of kangaroo meat into the smallgoods and processed meat markets (e.g. pies, sausages). The research targeted manufacturers, retailers and focused on groups of meat consumers. Investigations included their level of awareness and factors influencing purchasing choices including price and information provided, consumers values, concerns and preferences. Some of the main findings were:

- Kangaroo meat availability has increased and consumption has been growing slowly and steadily; the meat is now present on most domestic supermarket shelves.
- Issues remain concerning the harvesting of animals and meat hygiene.
- Many consumers are still cooking kangaroo meat medium to well done.
- Kangaroo meat should be promoted as a gourmet alternative, carries health benefits and has a wide variety of uses.
- Kangaroo meat mince has a high volume potential, deli products are likely to be received positively but kangaroo meat pies are unlikely to receive a significant market share beyond specialist pie shops.

4.6 Implications for Market Research

Given the foregoing background, the role of the ensuing market research was to assess the market sensitivities and the characteristics that processors, marketers and consumers (in the wider sense) place on individual attributes or the mix of attributes such as:

- conservation of kangaroos within the Conservancy
- production systems for traditional livestock fitting within a broader environmental management system
- quality control along the marketing chain including the ability to traceback
- conservation of other valuable native species of animals through control of pest animals
- the maintenance of native vegetation with improved control of weeds.

Consumers of kangaroo meat would need to be asked what they see as the key messages/information that would influence them to purchase kangaroo meat more regularly, order more frequently in restaurants etc. For example:

- knowledge of where it can be purchased
- more information on cooking methods
- quality assurance including health and hygiene
- assurance of source and ability to trace back
- humane harvesting methods
- sustainable management of kangaroos
- sustainable management of pastures and land with a higher level of ground cover
- sustainable management of native wildlife.
Other specific questions needing some exploration included:

1. Would you be inclined to try kangaroo meat, eat more, order more frequently in restaurants etc if you believed the source of the kangaroos was from a sustainably managed conservancy?
2. Would monitoring of kangaroos numbers and offtake within the conservancy provide some assurance to you of sustainable management?
3. Would you be willing to pay more for kangaroos meat if were sourced from an accredited sustainably managed land production system (e.g. control of feral animals that destroy wildlife, processes for reducing the spread of weeds, development of biodiversity corridors)?
4. Would you favour product that demonstrated management of an improved balance between kangaroos and sheep whereby less sheep were carried and more kangaroos were available for harvest?
5. Market Survey Findings and Implications

This section is based on the market research carried out with kangaroo meat processors and representatives of the kangaroo meat marketing chain including consumers. Results are based on a small sample of firms but the themes raised were consistent. Further details of these results are contained in Appendices 4, 5, and 6.

5.1 General Market Trends

Some key trends affecting potential demand for the Conservancy product include the following:

- The kangaroo industry at present is price competitive and over the past 12 months there has been intense competition between major processors.
- Some food service firms specialising in game meat supply have reported shortages of kangaroo and were interested in the potentially new product for that reason.
- Increased sales of kangaroo product through supermarkets is raising consumer awareness of kangaroo products and increasing consumption.
- Kangaroo product is generally seen as a niche product by consumers, retailers, restaurants and food service companies.

5.2 Interest in the Conservancy Product

Supermarkets, food service companies, hotels, restaurants, caterers and gourmet food retailers provided the following feedback on their interest in the Conservancy product. It should be noted that the number of respondents in some market segments was limited and that these responses may not necessarily be representative.

- Sixteen of the 19 firms surveyed were interested in trialling the product or in receiving more information on the product but the final decision to use the product would be based on a range of factors including quality, price and perceived demand. Two firms were not interested in the new product and one could not comment until they received more information.

- When asked to rate the strength of the opportunity for the Conservancy product in the market (on a scale of 1 to 5 where 1 is poor and 5 is very good), food service companies gave the highest rating (3.5) followed by hotels (3.3) and supermarkets (2.9).

- Food service companies (including game meat suppliers to high quality restaurants and gourmet butcher shops) felt that there is potential interest in the product. Kangaroo was more popular about 7 years ago and demand for game meat is ‘fashion’ influenced. For this reason, the new product would need to be supported by a concerted promotional campaign targeting chefs (e.g. chef workshops such as G’day Chef and targeted marketing) to encourage trial of the product. Consumer demand is seen as a key driver and promotion to consumers is also needed.

- Restaurants gave a rating of 2.0 out of 5 to the market opportunity. While some were interested, others were not interested in the product. Significant differentiation on quality and presentation would be needed. Successful branded products used by restaurants include MSA and other high quality branded meat. Junee Lamb has developed high quality packaging for restaurants and this approach has lifted demand. Kangaroo is currently supplied to restaurants in clear plastic, bloody bags and can be much less appealing.

- Catering firms (rating of 2.0 out of 5) generally felt that the market was not yet ready for the new kangaroo product but that there was potential for the product in the future.
• Hotel interests felt that there is potential demand for a high quality, environmental branded product (rating of 3.3 out of 5). As with the restaurant segment, promotion to chefs and marketing the product as a gourmet product is important.

• Small gourmet retailers sold very little kangaroo prosciutto or salami and were least likely to be interested (giving a rating of only 1.5 out of 5 for the strength of the opportunity).

• Supermarkets were interested in receiving the product and gave a rating of 2.9 out of 5. Independent supermarkets were interested in the product because it would provide a point of differentiation. One major supermarket is interested in seeing the product but consumer demand from the market would be needed to support sales.

• For some firms, the environmental focus is valuable due to the positioning of the business or because of increased interest from consumers. However, the Conservancy product would need to be positioned primarily as gourmet and secondly as an environmental brand.

• Those who did not see value in the environmental branding believed that the current supply of kangaroo already has good environmental credentials. Others felt it would be too difficult to differentiate the new product from the existing supply of kangaroo.

• Consumers are interested in the environmental branding but provided feedback that the product must also be seen as gourmet and high quality to attract interest, particularly from those who currently do not buy kangaroo meat regularly.

5.3 Supply Arrangements

Key issues to emerge on supply arrangements for the Conservancy product included the following:

• The potentially small volume of the Conservancy branded product and any problems with stability of supply will affect opportunities to supply the product into some firms and some segments. The hotels and supermarkets contacted confirmed that lack of continuous supply would be a barrier to using the product. Some of the firms in other segments would not be interested in the product if supply is not reliable or consistent.

• Clear messages are needed about the differences the new product offers. To achieve wider levels of interest and support, the quality and gourmet positioning will be the main drivers. Few are interested in a product that is differentiated only by the conservancy approach. Also, the environmentally branded product must be demonstrated to be superior in quality and packaging. Regarding quality, tenderness and food safety were considered paramount.

• Of the 19 firms surveyed 18 indicated that they would be willing to pay a higher price for the environmentally branded product. Firms stated they were willing to pay between 1% and 20% more for the environmental brand, but the actual price of the product would be determined by the quality of the kangaroo meat. All segments reported that the Conservancy product initially should have a similar pricing to existing kangaroo and, once the product is established and successful, the price could be gradually increased.

• High quality packaging and differentiated marketing is required. The current presentation of kangaroo product to restaurants and food service outlets was considered fairly basic and sends the message kangaroo is just a commodity product. Market feedback indicates that care and attention with packaging will help to differentiate high quality products, particularly in the restaurant segment.
• Businesses purchasing environmentally branded kangaroo want information on how sustainable harvesting is managed, credentials of the supplying organisation, firm ownership, food quality and system capabilities – a full profile on the operation, its capabilities and the benefits it can deliver. These firms felt that consumers would want information on the origin of the product, nutrition and health information (confirmation that it is a healthy product), information that kangaroo is tender and of good quality.

• Specialist game meat suppliers are interested in exclusive state supply arrangements whereby they would have marketing rights for a particular state.

• While some hotels, restaurants, food service and catering firms want a single point of contact for supply, others want to access a more sophisticated supply network to service different locations.

• Supermarkets want to see distribution support for a wide network of outlets.

5.4 Feedback from Processors

Two processors were interviewed and both felt that the best approach for the Conservancy product was to link with an existing processor that has established distribution pathways into key markets.

Processors had provided feedback that the market over the last 12 months has been extremely price competitive with major suppliers discounting prices for market share growth. This extremely competitive and price driven market can make it difficult for a new niche product to establish in the marketplace and seek improved returns.

Both processors contacted are interested in talking with the Maranoa Conservancy Group about providing a supply and distribution linkage.

5.5 Consumer Reactions

Two focus groups provided consumer feedback on the new kangaroo product.

Regular buyers of kangaroo meat are generally interested in the concept of an environmentally branded kangaroo product. For the majority of this group, a gourmet product positioning is essential. A few people in this regular user focus group purchase kangaroo meat because it is a cheaper meat option.

Overall this group would accept a slightly higher price if they knew the product was delivering positive results for the environment and was a gourmet product.

Consumers are not interested in information on harvesting processes but do want to be assured of quality and food safety.

Consumers are interested in the ‘environmental story’, particularly the fact that the product is produced in Queensland by Queensland based companies.

It is important to provide an effective, succinct and positive environmental story to accompany the product. Although consumers understand concepts such as ‘organic’ and ‘free range’, consumers felt that the conservancy concept would need a simple, easy to understand definition. People did not find the concept or the benefits easy to understand. Some saw the fact that cattle and sheep production was continuing, along with possible land clearing on properties, was in conflict with the concept of a net gain to the environment.

There was strong interest in the low greenhouse gas emissions from kangaroos.
Both regular and infrequent users of kangaroo are interested in information on cooking methods for the best eating result and recipes using kangaroo. Consumers identified opportunities for use of ‘bush tucker’ complementary spices and food products (e.g. marinades, sauces) that could be sold with the Conservancy kangaroo.

Consumers who have not purchased or eaten kangaroo in the past need to be made aware of the environmental benefits of kangaroo and that it is a high quality, gourmet product. The perception that kangaroo meat is dog food or pet food is not a positive association for promotion as gourmet product. This group of non-users felt that the environmental branding, along with the gourmet positioning, would encourage them to try the Conservancy product.

### 5.6 Challenges and Opportunities

The research has identified some challenges and also some opportunities for the new Conservancy branded product. Key challenges for the new venture include:

- **Gaining market access and providing the necessary support and customer service backup required was identified as a challenge.**
- **A very high quality product was considered essential to penetrate all markets, but particularly the restaurant market, gourmet butchers and game meat specialist distributors.**
- **Maintaining stability of supply was generally important for consumers and for each of the market segments. A seasonal downturn would be understood by consumers, however patchy supply would result in consumers not consistently coming back to the product.**
- **Although there is potential for the Conservancy branded kangaroo to increase its price compared with the standard product, the initial supply would need to be price competitive with existing supplies to build up a market following.**
- **Consumer acceptance of kangaroo is growing. However it is regarded as a niche product and consumers do not have a great deal of understanding of this product, particularly as a high quality gourmet product. Consumer education, in store demonstrations and promotion or endorsements of the product by chefs needs to be undertaken to appropriately position the product.**
- **Establishing a niche product within a niche market (existing kangaroo supply) was seen as a difficult task. Some firms felt that there was still limited demand for kangaroo at the present time and that considerable marketing effort would be required to create consumer demand (considered essential for long term success) and market the new product to different market segments.**

Key recommendations based on the market research findings include:

- **Establishing a partnering arrangement with one of the processors may offer the best fit for the new venture in the short term in terms of gaining knowledge about the market and its market positioning.**
- **Exclusive supply arrangements to game meat suppliers in some states could also be considered.**
- **The Conservancy product would need to be promoted as a gourmet and environmentally branded high quality product; use of all three themes would be vital in the positioning of the product.**
- **The environmental brand would need to be simply communicated.**
- **Developing effective packaging and a recognisable, attractive branding for the product would be recommended. It will be important to provide leaflets for recipes when targeting consumers and provide the necessary information on the product when targeting key market segments, e.g. quality, food safety and the Conservancy message.**
- **It would be highly desirable to undertake a targeted consumer promotion strategy to raise awareness of the quality of product and its environmental credentials.**
- **Depending upon the availability of product, and once some security of supply and quality has been obtained, it may be then viable for the venture to target smaller volume, high value markets. However these market segments are ‘unforgiving’ in terms of their expectations of quality, consistency and availability of supplies.**
### 5.7 Summary of Main Findings from Market Research

Table 5.1 provides a summary of main findings and implications for the Maranoa Conservancy Group derived from the market research. This summary covers:

- Critical success factors.
- Best markets.
- Positioning and branding.
- Marketing and promotion.
- Distribution strategies.

<table>
<thead>
<tr>
<th>Key Findings</th>
<th>Implications</th>
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<tbody>
<tr>
<td><strong>CRITICAL SUCCESS FACTORS</strong></td>
<td></td>
</tr>
<tr>
<td>• Raising awareness amongst buyers and consumers of the quality of the product and the environmental brand.</td>
<td>• Consistency of supply is vital.</td>
</tr>
<tr>
<td>• Establishing effective distribution arrangements.</td>
<td>• Product must be regarded as very high quality.</td>
</tr>
<tr>
<td>• Targeting market segments and supply volumes that suit the capacity to supply.</td>
<td>• High quality packaging is needed to differentiate the kangaroo product from other options in the marketplace – at present there is relatively low value packaging occurring.</td>
</tr>
<tr>
<td>• Focusing on establishing a premium quality and environmental brand.</td>
<td>• Without a combined quality and environmental brand, the product will not be successful.</td>
</tr>
<tr>
<td>• Being able to supply the product for a similar price to existing kangaroo during the establishment phase of 12 to 18 months before increasing prices.</td>
<td>• It is a tight market at the present time and the new product must be price competitive particularly as it establishes a place in the market.</td>
</tr>
<tr>
<td><strong>BEST MARKETS</strong></td>
<td></td>
</tr>
<tr>
<td>• Supermarkets represent best potential for volume supply but the new product may have difficulties in terms of consistency of supply and price competitiveness.</td>
<td>• Consideration must be given to whether the Conservancy wants to work with one or more processors – exclusivity will create increased loyalty but may limit the distribution of the product, particularly if targeting specialist markets.</td>
</tr>
<tr>
<td>• Consumers see the new product as a gourmet product – not necessarily a supermarket product.</td>
<td>• Undertake discussions with processors and form an alliance with one processor that has the potential to take the product into key markets.</td>
</tr>
<tr>
<td>• Processors advise that the market is still small for kangaroo but is developing. Relying only on the specialist deli and restaurant market may not be sufficient to provide viable volumes without a widely developed distribution system.</td>
<td>• Investigate exclusive supply arrangements with specialist game meat food service companies that distribute to restaurants and gourmet butcher shops.</td>
</tr>
<tr>
<td>• End customers expect a high level of support from distributors – it would be difficult for the Maranoa Conservancy to set up its own distribution network, given the price competitiveness of the marketplace and the limited supply of product.</td>
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<tr>
<td><strong>POSITIONING AND BRANDING</strong></td>
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</tr>
<tr>
<td>• Environmental branding is seen as a plus by consumers but an environmental brand alone is insufficient to gain increased interest and uptake, particularly from consumers that have higher disposable incomes. A combined quality/gourmet/environment brand is needed.</td>
<td>• The Maranoa Conservancy must focus on quality cuts and quality supply. This may create issues in terms of use of the whole carcass.</td>
</tr>
<tr>
<td>• Kangaroo meat is seen by the food service industry</td>
<td>• Quality and gourmet branding supported by environmental branding needs to be reflected in packaging and marketing information regardless of</td>
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</table>
and restaurants as being relatively low value. These markets are driven by quality and gourmet brands – distinctive differentiation of the product is required to be able to differentiate it from the bulk supply of kangaroo meat.

**MARKETING AND PROMOTION**

- For consumers, in store promotions and tastings are an important part of getting existing current consumers and potential new consumers to try the new product.
- Leaflets and high quality packaging are required to concisely communicate the gourmet and environmental branding of the Maranoa Conservancy kangaroo product.
- Public relations activity such as articles in gourmet magazines and endorsements by key chefs will be required to support a superior branding and marketing position for the product.
- There is potential to add spices and accompaniments to the kangaroo product for consumers, e.g. lemon myrtle and other spices for marinades. Gourmet users want to have access to these options but do not necessarily want to purchase premarinated product.
- Gourmet, high quality branding will require considerable marketing resources in order to do this successfully and professionally.
- A niche branding marketing strategy needs to be developed in close consultation with the processors or others with whom the Maranoa Conservancy may partner. Unless there is close collaboration between the parties, marketing work undertaken by the Maranoa Conservancy may not deliver the desired results.
- Working with a respected food journalist and commentator is recommended to provide strategic advice on marketing, prepare articles and identify suitable marketing events e.g. chef’s workshops.
- Considerable funding may need to be provided to achieve profiling of the kangaroo product in gourmet magazines and chef endorsements.
- A decision on initial target markets will dictate the range of marketing activities undertaken.
- Develop recipes and point of sale/support material for these markets to explain the brand and the Conservancy ‘story’.

**DISTRIBUTION**

- All market segments want and expect consistency of supply in a high quality, gourmet product. Although consumers and businesses can accept seasonality, (i.e. mangoes are not available all year round), intermittent supply is very difficult to manage. Consumers and businesses will be reluctant to support a product that is sporadic in its supply arrangements.
- The cost of establishing separate supply and distribution arrangements are high. The Maranoa Wildlife Conservancy needs to choose a processor or partner that offers synergies in terms of target markets for the new product and a compatible overall positioning in the marketplace – gourmet and high quality.
- Consistency of supply will be a critical issue as the product brand is developed.
- Coordination and marketing support will be a priority to ensure that effective messages regarding the new product are delivered and supported through the distribution arrangements of the partner organisations. This includes the preferred processor(s) and possible exclusive state supply arrangement with specialist game meat companies.
6. Discussion

6.1 Sustainable Management

There is a need to demonstrate the value of a conservancy environmental brand that can be promoted to consumers. As mentioned earlier the concept may be difficult to promote to consumers.

The propositions identified so far by the Conservancy is that landholders will carry out enhanced habitat protection and control of invasive species that diminish biodiversity or reduce damage to land as a result of better management of the kangaroos and traditional grazing enterprises with sheep.

The focus group discussions revealed some difficulties in understanding the Conservancy concept as perhaps there were too many messages involved and not one issue that could be driven home. Some of the simple conservation/environmental concepts that appeared important were the maintenance of sustainable populations of kangaroos, sheep/cattle versus kangaroos, greenhouse gas production, and some concerns about shooting females and joeys in the pouch.

Possible dimensions to pursue could include:

(i) Sustainable kangaroo management in terms of numbers being able to regenerate quickly (e.g. not harvesting young females or females with joeys in the pouch) as well as in terms of improved information on kangaroo numbers and maintaining sustainable yields. For example, this may include sending GPS/GIS data to Queensland Parks and Wildlife Service (QPWS) to bypass the current paper trail with electronic data transfer. This will allow more accurate and quicker updates of the kangaroo database daily with possible cost savings and a higher level of efficiency of administering the quota. This would demonstrate to government and consumers that the Conservancy is supportive of an accreditation system and influencing consumer attitudes by demonstrating the efficacy and responsiveness of management of sustainability of harvest quotas etc.

(ii) Sustainable land management including grazing pressures, and the balance between traditional livestock grazing systems and kangaroo management. Maintaining an appropriate balance of traditional livestock and kangaroo populations could be promoted. This may mean more sheep/cattle or more kangaroos. There is the potential for there to be fewer sheep/cattle, but on the other hand harvesting kangaroos more strategically will allow pastures to regenerate more rapidly overall. One option is to focus on general sustainable management within the conservancy of grass, water and animals. It could be possible for the same label to be used on cattle, sheep, etc, given that the same land management that was producing the kangaroo product was also producing other products.

(iii) Sustainable management of other native animal species within the Conservancy and highlight in general conservation management on properties (e.g. some form of wildlife stewardship certification label). Also, there is the possibility to promote the benefits of harvesting native animals given pending climate change. Native animals generally manage better during drier conditions, and given changes in climate and potential land use, there is a possibility that in years to come there may be kangaroos grazing where sheep used to graze.

(iv) The relative greenhouse gas emission implications of kangaroos and beef/sheep production could be used to promote the environmental implications of kangaroo production and harvest.

(v) The possibility of labelling carcasses to differentiate between species and sex may demonstrate sustainable management. For example, gathering information cost effectively on sex, age and weight of the harvest so that population models can be used to demonstrate sustainable populations of non-harvested animals.
It may be possible to produce an explanatory booklet emphasising the benefits to Australia including those to the environment and to consumers; this would need to be more than a simple message and may contain elements of each of the themes above.

Much of the explanatory and supporting material as identified above would need to be aimed at key intermediaries in the market such as chefs and gourmet butchers rather than end consumers.

Since many of the Conservancy properties have already been certified under ALMS, the simplest strategy would be to claim that certification and provide a simple, short and easy to read explanation of what ALMS represents. In addition it would be necessary to indicate how the kangaroo management system under ALMS differs from the traditional system under which kangaroos are produced. However, only a handful of properties have been certified so far under ALMS. It would be necessary for this number to be substantially increased in order to legitimately claim some type of formal accreditation for the product.

6.2 Humane Harvesting

Currently harvesting techniques are generally considered humane by most consumers. For example, there is a harvesting best practice developed by the Game Harvesters Association, there is required training of harvesters, humane disposal of pouch joeys and other ethical practices.

There is sufficient information at present to conclude that the 10% or so of people who seriously worry about animal welfare or ethical considerations will not change their opinion anyway and therefore are not important as a potential market target. Animal welfare issues (and more specifically harvesting issues and how kangaroos are killed) may therefore not be important in any market development. An exception to this would be if the shooting of kangaroos on Conservancy properties was perceived to be more humane than that for the rest of the industry and this would be difficult to address.

The market research showed that for most consumers any animal welfare and harvesting considerations were not a major issue and these issues are probably best left alone. However, the market research demonstrated some concern about the residual population if females were harvested, the harvesting of females with pouch joeys and any genetic implications in the longer term of harvesting the larger animals.

6.3 Product Availability

The regional or Conservancy quota, and the relatively small size of the Conservancy resource, may restrict supply of kangaroo meat from the Conservancy. As indicated from the market research, this may have implications for the commitment to the product of those in many market segments (and possibly some consumers). There may well be a critical mass of kangaroo meat marketed under the Conservancy brand that would need to be made available to the market for it to be promoted effectively. Assuming there was a price premium available for the Conservancy product, there exists somewhat of a chicken and egg situation whereby a price premium may not be captured until there is sufficient supply, and that sufficient supply may not be available until a price premium is apparent.

Apart form total quantity available, continuity and the variability of supply may be key issues in marketing a Conservancy badged product. Strategies for maintaining a continuous supply or at least reducing supply variability may include one or more of the following:

- Managing the kangaroo population on a whole area of Conservancy basis.
- Reducing sheep, cattle (and in some cases goat) numbers in drought periods.
- Utilising smaller kangaroos (and possibly wallabies) and subsidising the meat price to processors/marketers.
- Limiting the meat sold under the Conservancy brand in periods of ample supply so that expectations for supply continuity were not high, and with the excess kangaroo meat sold generically.
• Form marketing alliances with other like-minded Conservancies, preferably in other regions so that some form of spatial diversification were in play that may reduce variability except in nation wide droughts.

6.4 Product Quality, Integrity and Traceback

It is evident from the market research that meat quality and food safety and integrity are key issues. A member of the Maranoa Conservancy has developed a system of barcoding and electronic data capture including GIS and GPS information. One benefit of this system could be to stop kangaroos being taken illegally out of the region with the quota. The new system, if implemented by the Conservancy, would demonstrate quality control back to the paddock and to the chiller level and may even extend further down the value chain if that can be organised within the distribution system. The benefits of the traceback system would be proof of the product coming from the Conservancy as well as a better ability to quickly trace product back to the source of any quality problem.

Also, the Conservancy could improve the arrangements around product integrity. Currently there are no formal supply chain agreements within the kangaroo marketing chain. It is possible that product quality could be improved from the shooting and field harvesting, handling to the chiller, chiller management and then transport to the processor. This may involve for example, use of bar codes and temperature scanning devices. There is currently a code of practice for chiller management but some industry opinions are that this area of the supply chain could be significantly improved.

An issue associated with improved chain management is whether improved quality means a higher cost of supply (e.g. harvesting or chiller costs) and whether there are low cost areas of improvement that can be made. Stacking and spacing in chillers appear to be an important issue as there is a need to cool carcasses down quickly but this is not possible when chillers are full. Choices need to be made therefore between smaller or larger chillers and their number and location, regularity of emptying, single or double hanging etc. The cost implications of all such changes require estimation. Also, it would be important to assess how quality could be improved by implementing changes in terms of less wastage or improved eating quality.

As mentioned earlier, harvesting smaller kangaroos may not be profitable unless there is a niche market for smaller cuts, as they have high processing costs per kg and limited skin value. Steps taken to ensure a high quality product need to be listed and communicated to those harvesting on Conservancy properties and the operator of the Conservancy chillers.

6.5 Distribution

Assuming a high quality product is established, there would be a number of options for distribution and marketing. The business model chosen would depend on the extent of product differentiation envisaged, resources available to the Conservancy and the attitude to risk.

Forming a marketing relationship with one processor would have the advantage in the short term in that there would be an established market for the product while matters of harvesting organisation and chiller management are developed. Also, a single processor is more likely to commit to a new product with appropriate promotional and educational support. On the other hand a single processor may be more interested in securing access to a high quality product for existing markets rather than developing the market for a new product. While a small premium may be paid for quality in the first instance, this premium may never attain a high level if the Conservancy product is not well differentiated in the market place. The Conservancy product would then most likely be sold into the mass market for kangaroo meat (e.g., supermarkets).

Some processors may be more concerned about maintaining throughput in the processing facility, rather than developing a premium price in the market place through packaging or promotion. The possibility remains of a joint market development effort by the Conservancy and the processor.
A second option may be to make the product available to more than one processor, with preferences given to processors or marketers with ideas for promotion as coming from a conservation positive production system.

Another option may be to pay for carcasses to be processed under contract and then market the processed cuts directly to an up-market food service firm that may supply restaurants or a game meat specialist distributor.

In all of these options, it may be possible to obtain a government grant to help develop the packaging, promotional material, and implement promotional activities.

The strategy of developing the market for the Conservancy product at existing prices and then gradually increasing prices once a market niche has been developed is favoured. The potential for increasing prices to domestic consumers and to export market is presumed to be limited in the short term. The Conservancy product has first to be differentiated and proven in terms of quality, food safety and environmental credentials. Only then would price premiums be likely to be extracted from processors or other distributors.

6.6 Cooking and Health Aspects

Several studies have suggested that there is still limited knowledge of the best methods of preparing, cooking and serving kangaroo meat in the home and this may be constraining the home consumption market.

The market research suggested that overcooking may still be quite prevalent. Specific messages regarding the integrity of the meat need to be developed that while the meat is ‘game’, there are no pathogens or parasites that are associated with kangaroo meat. This may be endorsed by some form of survey including analyses of randomly selected Conservancy product by an accredited laboratory. Such endorsement may reduce the overcooking tendency some of which is possibly associated with this fear.

One comment from the focus groups was that some found the gamey flavour of kangaroo very strong and suggested using marinades and spices (perhaps sold as accompaniments) to cut the flavour.

Kangaroo meat is endorsed by the Heart Foundation as low fat and this characteristic is currently being exploited by some involved in kangaroo marketing and by the Kangaroo Industry Association. This message is well received by consumers and any promotion of Conservancy product will need to include this message as well.

6.7 Size and Location of Markets

The sizes of the markets identified for targeting are generally sufficient to accommodate the supply of kangaroo meat from the Conservancy. The key market segment considered appropriate is the upmarket gourmet sector using highest quality cuts. This key market has a number of sub-segments that could be targeted by Conservancy marketing, for example, gourmet butchers, restaurants and hotels. These markets are potentially large but promotion will be required for them to be successfully penetrated. The location of markets will be dependent on the distribution system chosen. However, the majority of the upmarket segments are likely to be in NSW and Victoria.
7. Conclusions and Recommendations

1. There are four major conclusions relevant to any market development of Conservancy kangaroo product through a branding and promotional strategy:
   (i) Environmental management as a concept in kangaroo meat marketing has some potential but the conservation gain concept is difficult to address in a manner that can easily be understood and believed. This remains a challenge for the Maranoa Conservancy Group.
   (ii) Environmental credentials are not sufficient on their own to develop a market niche for the Conservancy product. Meat quality and integrity are very important and there need to be reasons provided as to why the Conservancy product is higher quality than the rest of the kangaroo meat in the market.
   (iii) Given the likely Conservancy supply, the product would need to be positioned as a gourmet product at the top end of the market including such market targets as restaurants and gourmet butchers. One distribution channel to facilitate this would be through game meat specialist distributors.
   (iv) Significant promotion and packaging innovation would most likely be required to develop a niche market.

2. The difficulties and risks, time and costs for development of a niche market should be recognised. It is unlikely that the Conservancy could raise the resources required (in the hundreds of thousands of dollars) for this market development unless there was some partnering with existing players.

3. Supply variability will be a constraint in market development, mainly in gaining the required support from within the distribution system. Potential multiple strategies to overcome some of this variability have been identified.

4. It will be important to identify where improved quality and/or cost savings/increases to the total system are likely to occur from the Conservancy operating its own chillers. There is a need to avoid pursuing a system that increases costs without net benefits. Demonstrating profitability to the overall system from changes should be given precedence with secondary attention given to the distribution of any gains or losses, at least in the first instance.

5. It is recognised that the current marketing chain has evolved over a number of years. There will be entrenched interests, distrust and opposition to change as has been demonstrated already.
Appendix 1: Other New Enterprises for the Conservancy

Several other enterprise products and markets were outlined in the earlier study of WMC enterprises. Apart from adding value to the kangaroo resource, three other opportunities have been identified in the past for the Maranoa Conservancy. These are ecotourism, cypress pine and other vegetation management including regrowth control, and bush foods.

A1.1 Vegetation Management

Native vegetation management can be considered a part of property management. One of the more common native species within many of the Conservancy properties is cypress pine. Because the conservancy properties are leasehold the cypress pine timber is considered property of the State of Queensland. Some pastoralists perceive valuable timber is often lost to fire and age, and could be managed better than currently (via enhancement thinning, pruning). It is possible that this resource could be better managed under property management plans within an overarching Conservancy plan.

QDNRW has certification under the Australian Forestry Standard (AFS) and presumably this applies to cypress pine. Also some cypress pine mills we understand have chain of custody certification. However, individual landholders can not get certified under AFS.

One opportunity would be to assess whether the Conservancy itself could get leasehold rights changed in order to be able to manage and harvest the cypress pine on their properties. The resource could then be managed on a Conservancy basis.

Regrowth control (has an impact on pasture resource) and ecological value of the regrowth, and soil condition is controversial and interacts with the existing vegetation management laws. Regrowth of a species such as cypress pine could be incorporated into the management plans.

A1.2 Ecotourism and Eco-education

One opportunity is reintroduction of endangered mammals and marsupials due to improved feral animal control. Kangaroo viewing as a feature of ecotourism is another option that could be considered.

Ecotourism requires either a central feature that is unique or a series of attractive tourist activities roughly within the same region. There would be a need to have some accredited system of wildlife management to show off; such may include control of ferals, reintroduction of species, integrated kangaroo and traditional livestock management systems etc. One constraint to ecotourism is that vehicle movements would increase so that visitor education regarding weed spread would be required.

Ecotourism could include the Nalingu Aboriginal Corporation with regard to the YUMBA and the preservation of its history. YUMBA Indigenous Cultural Education and Knowledge Sharing Centre hosts an interpretive trail and guided tour, an education centre and a plant nursery.

Booringa Shire Council is still interested in the SWE project in the Maranoa. A bird watching trail is still on the agenda and could include properties in the Maranoa Conservancy but would most likely be developed as a broader initiative to cover St George, Surat, and Injune areas. This is because the potential project was developed in the past by Booringa Shire on behalf of 4-5 other shires in the district. There were 4 ecotours involved: bird watching, fishing, 4WD tour, and cultural heritage.

The next step in the stalled bird watching project is to identify the hot spots for bird watching in the region, and carry out market research on the type of watching required, accommodation and other infrastructure needs of the potential market. Birds Australia has shown interest in the market research
but funding is needed to take it to the next stage. Also required is a listing of birds in the region in combination with the scientific name, common names, and indigenous names of birds as well as the cultural significance of birds to the aboriginal communities (Noela Ward, Booringa Shire Council, pers. comm., August 2007).

Also investigated have been photography groups from the city, and an opportunity to have a wood turning weekend, something similar to what is done at Maleny & other places.

Alison Alexander has also done some work with Booringa Shire council to develop some signature dishes from the local area. There is an opportunity for kangaroo to be one of these dishes. These signature dishes are then promoted at the local shops, restaurants, pubs, etc.

A1.3 Bushfoods

Australian desert limes grow in the region and could be the basis of a bush food industry. Contacts for this idea and other bush food prospects include the Booringa Shire Council, Jock Douglas, and Nalingu Aboriginal Corporation. A key question is how could these prospects be aligned with the Conservancy.

An investigation into market for native honey could be useful. However, one or two pastoralists could start such an enterprise on their own and it would not appear to require Conservancy involvement.
Appendix 2: Survey Questionnaires:
Strategic Research for the Maranoa Conservancy Concept

INTRODUCTION

Good morning/afternoon, my name is …… from Deborah Wilson Consulting Services. I am following up on the earlier email about the survey we are conducting for the Maranoa Conservancy Concept. I wanted to get your feedback on the value of environmentally branded kangaroo meat.

All of the information that you provide is confidential and only summarised information is provided to the client.

Would you have 10 to 15 minutes now to undertake the survey?

Name: ____________________________________________________________________

Organisation: _______________________________________________________________

Phone No:   ________________________________________________________________

Interviewer:  __________________________________    Date: _______________________

1. Current Profile of Kangaroo Meat Purchases

1.1 Do you currently buy any kangaroo meat? *(Record all answers)*

Yes  1 *(go to 1.2)*
No  2 *(go to 2)*

1.2 What type of kangaroo meat do you currently sell? *(Record all answers)*

___________________________________________________________________________

___________________________________________________________________________

2. REACTION TO CONSERVANCY SUPPLY

2.1 I sent through an email on the planned environmentally branded kangaroo from the Maranoa Conservancy. The benefits offered by the environmentally branded kangaroo also include improved quality, food safety and humane harvesting. The environmentally branded kangaroo would represent only 2% of the total kangaroo available for human consumption. What are your initial thoughts on the concept? *(Record all answers)*

___________________________________________________________________________

___________________________________________________________________________

2.2 What is your reaction to environmentally branded kangaroo versus the ordinary supply of kangaroo? *(Record all answers)*

___________________________________________________________________________

___________________________________________________________________________
2.3 What value do you and your customers place on sourcing environmentally branded kangaroo? (Record all)

2.4 What benefits do you think the environmentally branded kangaroo needs to deliver to significantly differentiate this kangaroo meat from existing kangaroo product? (Record all answers)

2.5 What are the minimum differences you would need to see in the product to support a distinctive environmentally branded kangaroo product? (Record all)

2.6 What do you expect in terms of quality, consistency and price from this new brand of kangaroo meat? (Record all answers)

2.7 How important is the sustainable yield approach to you - harvesting to keep the environment and wildlife balance in the conservation area? (Record all answers)

2.8 What information would you want about an environmentally branded product? (Record all)

2.9 What information do you think consumers would want about the environmentally branded kangaroo product - what does the brand need to say to consumers? (Record all)
2.10 How interested are you in buying environmentally branded kangaroo product?

2.11 (a) Would you consider trialling environmentally branded kangaroo? Why? Why not?

(b) What types of organisations do you think would support a trial? (Record all)

2.12 Would you promote the environmental brand to your customers? (Record all)

2.13 What contact points and supply arrangements would you need from the conservancy if you bought the environmentally branded kangaroo? (Record all)

3. INTEREST IN ENVIRONMENTALLY BRANDED KANGAROO PRODUCT

3.1 Would you still be interested in the environmentally branded kangaroo product if the supply was limited - the conservancy represents only 2% of the total market? (Record all)

3.2 What is the minimum quantity of environmentally branded kangaroo that needs to be available to support you buying the product regularly? (Record all)

3.3 What will drive demand for environmentally branded kangaroo? (Record all)
3.4 What marketing support is needed to promote the environmentally branded kangaroo product? (Record all)

___________________________________________________________________________

___________________________________________________________________________

3.5 Would knowing that other customers are using the environmentally branded kangaroo product be important in your decision to buy it? (Record all)

___________________________________________________________________________

___________________________________________________________________________

3.6 What would prompt you to buy the environmentally branded kangaroo product? (Record all)

___________________________________________________________________________

___________________________________________________________________________

3.7 Would you be prepared to pay a slightly higher price for environmentally branded kangaroo? What percentage increase would be acceptable? (Record all)

___________________________________________________________________________

___________________________________________________________________________

3.8 Eating kangaroo meat can reduce greenhouse gas emissions compared to eating beef - is this an important message for you and your customers? (Record all)

___________________________________________________________________________

___________________________________________________________________________

3.9 (a) What kangaroo products and pack sizes would you want in environmentally branded kangaroo? (Record all)

___________________________________________________________________________

___________________________________________________________________________

3.10 What quantity of kangaroo meat do you sell in a week? (Record all answers)

___________________________________________________________________________

___________________________________________________________________________

3.11 What price per/kg do you pay for the kangaroo meat that you purchase? (Record all answers)

___________________________________________________________________________

___________________________________________________________________________

3.12 What are the most important priorities for the new product to get support from the market?

___________________________________________________________________________

___________________________________________________________________________
3.14 On a scale of 1 to 5 where is poor and 5 is very good, how would you rate the strength of the opportunity for the environmentally branded kangaroo in the marketplace? Why is that?

___________________________________________________________________________

___________________________________________________________________________

3.15 Thanks for your feedback today. Is there anything else you would like to add?

___________________________________________________________________________

___________________________________________________________________________

Thank you for your help with this important survey.

Just to confirm, my name is……..from Deborah Wilson Consulting Services and this research is carried out in compliance with the Privacy Act. Information you provided will only be used for research purposes.
Issues to be Covered in Consumer Focus Groups

Current Consumption and Attitude

The focus group will start with a few general questions on kangaroo consumption and awareness. Specific questions for the focus groups include the following:

- How often do you eat kangaroo?
- Why/why don’t you eat kangaroo?
- What recipes and cooking approaches do you use? What it is best suited for, preferred cooking (well done, medium rare, rare)?
- What is your view on the favour, tenderness/toughness of kangaroo?
- How well does kangaroo compare with other meats?
- What are the health, nutrition and other benefits of eating kangaroo?
- Are there any disadvantages of eating kangaroo meat?
- Sources of information on kangaroo meat and cooking/recipes?
- What consumers know about how kangaroos are killed and processed?
- What do you know about how kangaroos are harvested?
- What are your thoughts on wild culling?
- Do you know the population of kangaroos and the impact of culling?
- What do you know about the processing chain and any concerns about food safety? Comparison with other meat sources – current concerns (e.g. supermarket storage of meat) and how kangaroo meat is regarded in terms of safety?
- Reaction to the message that there are no food safety risks in eating kangaroo meat?
- Any other concerns e.g., humane killing?

Reaction to Conservancy Supply

- Reaction to the conservancy concept. The conservancy represents about 2% of kangaroos culled in Australia.
- Reaction to the size and location of the conservancy (map needed) and the fact that kangaroos can roam wild over a large area.
- Did you know that eating kangaroo meat can reduce greenhouse gas emissions compared with eating beef? How important is this message to you?
- What other benefits do you expect the conservancy to deliver e.g. environmental?
- What do you think of the sustainable yield approach?
- What is your view of a conservancy brand versus an ordinary supply?
- Are you interest in the conservancy branded kangaroo?
• What benefits would the conservancy product need to offer to prompt you to trial it and buy it on an ongoing basis?

• Range of information consumers want about the conservancy brand and its role in sustainable properties, preserving the environment, sustainability of kangaroo populations.

• How conservancy product should be branded compared with other kangaroo.

• What does the brand name needs to get across to consumers?

**Interest in Conservancy Kangaroo Product**

• What are the best types of kangaroo products for the conservancy kangaroo e.g. fresh (mince, cuts), smallgoods, other?

• Are you interested in kangaroo smallgoods – interest in different products, positioning as an every day deli item?

• Are you interested in gourmet items/flavours as special occasion purchases?

• What factors or information would prompt you to buy conservancy branded kangaroo over other kangaroo product?

• If conservancy kangaroo product is available, would be more interesting or more attractive than other premium meats e.g. organic beef, corn feed chicken, free range chicken?

• What is your view of the conservancy or environmentally branded kangaroo product (good to buy for environmental reasons, higher quality product, gourmet product, different/better tasting)?

• What information do you want to know about conservancy kangaroo available covering:
  - Type of product available e.g. fresh mince, fresh cuts, smallgoods. What consumers think are the best product types for conservancy and why.
  - Availability – does it always need to be available or would consumers still buy it if supply was intermittent or seasonal. The conservancy may not be able to supply the same volume all the time. Whether consumers would still buy the product if it was only available occasionally.
  - Differences between conservancy product and other kangaroo product.
  - Pricing – kangaroo compared with beef and whether people would pay say 20% more for conservancy kangaroo.

• Why would you try and buy conservancy kangaroo product?

What would prompt you to buy conservancy kangaroo meat – in store tasting/promotion, magazines, chef endorsement?

What would encourage you to order kangaroo meat more frequently at restaurants or buy it more frequently at supermarkets?

• What are the most important messages to encourage people to order kangaroo meat more frequently at restaurants or buy it more frequently at supermarkets (unprompted discussion)?

How importance are these messages in encouraging people to order kangaroo meat more often at restaurants or buy it more frequently at supermarket:
- Where people can buy kangaroo.
- More information on how to cook kangaroo and more kangaroo recipes.
- The quality assurance systems used including health and hygiene.
- Assurance about the source and the ability to trace back (as with the beef industry).
- Humane harvesting methods – more humane that intensively reared animals.
- Sustainable management of kangaroos.
- Sustainable management of pastures and land with a higher level of ground cover as a result of harvesting kangaroos from the conservancy area.
- Sustainable management of wildlife.
- Reducing greenhouse gases by eating kangaroo.

• Would you be more inclined to try kangaroo meat, eat more or order more frequently in restaurants if you believed the source of the kangaroos was from a sustainably managed conservancy?

• Does monitoring of kangaroo numbers and numbers processed from the conservancy give some assurance to consumers of sustainable management?

• Would you be willing to pay more for kangaroo meat if it was sourced from an accredited sustainably managed land production system (e.g. control of feral animals that destroy wildlife, processes for reducing the spread of weeds, development of biodiversity corridors, etc.)?

• Is it important to have an improved balance between kangaroos and sheep whereby less sheep were carried and more kangaroos were available for harvest?

• Are there any other important messages or information that would encourage people to try and buy conservancy kangaroo product?
Appendix 3: The Maranoa Conservancy Concept

A3.1 Introduction

The Maranoa Wildlife Conservancy has been formed under a program of Sustainable Wildlife Enterprise trials by a group of pastoralists, predominantly cattle producers in central /southern Queensland. The landholders involved already had exhibited a “Landcare ethic” and had been undertaking catchment planning. The group views kangaroos predominantly as a resource that can be utilised for both economic and biodiversity reasons, rather than as a pest for control and disposal.

Some kangaroos are harvested within the Conservancy at present (some for human consumption and some for pet food) under a regional quota system as for other areas in Queensland. Other kangaroos and wallabies are harvested under a damage mitigation permit. The carcasses are not allowed to be taken from the field after they are shot.

A number of landholders within the Conservancy have recently been audited under the ALMS process. ALMS (Australian Land Management System) is an ISO14001 accredited Environmental Management System or EMS. The two differences between it and any other EMS is that it takes into consideration the catchment targets/i ssues and it has a focus on biodiversity. No other EMS does this.

A3.2 Broad Concept

The objective of the Conservancy is to promote biodiversity through:

- Land, vegetation and animal stewardship at both individual property and Conservancy /catchment scales.
- Wildlife management through protecting and enhancing the habitats of existing wildlife and potentially through re-introduction of native species.
- Sustainable commercial livestock management.
- Sustainable kangaroo management including sustainable harvesting rates and utilising sustainable harvesting practices.

A3.3 Specific Management Practice Ideas

Grazing management and overstocking

A key area for improved management of the Conservancy is to focus on general sustainable management within the conservancy. Maintaining an appropriate balance of traditional livestock and kangaroo populations is paramount. There is potential for there to be fewer sheep/cattle, watering points, fences etc. Also, harvesting kangaroos more strategically will allow pastures to regenerate more rapidly. Managing total grazing pressure especially in drought is a key aspect of kangaroo interaction and integration with property management.

Location and time of harvest information could be integrated with information on land, pasture, weather and seasonal conditions. Kangaroo harvest data assembled on a Conservancy basis can be used for both livestock and kangaroo management. One idea that has been canvassed is for the Conservancy to give priority to harvesting kangaroos on spelled regenerating paddocks, with harvesters being requested to harvest in specific locations on behalf of the Conservancy group. This
does not happen under existing harvesting arrangements. Also, sharing information about location and aggregation of kangaroos may be beneficial to harvesting efficiency. A coordinated approach may allow better strategic control of large concentrations and easier shooting.

**Invasive species**

The maintenance of native vegetation by control of weed spread could be improved with kangaroo harvesters washing down vehicles before entering another property and would be part of an overall environmental management plan.

Kangaroos are the most common native species within the Conservancy. However, the number of many other species has been reduced by wild dogs, foxes and cats, and feral pigs. There is some anecdotal evidence that there has been loss of native birdlife (plains turkeys, brolgas) as a result of increased numbers of feral animals. The situation may have been worsened by the damage mitigation permits whereby some kangaroos are left to rot and die in the paddock.

Kangaroo harvesters working within the Conservancy may be able to assist with wildlife management by shooting feral goats, foxes or cats.

If ferals can be controlled, there is scope for reintroduction programs for native animals like the bilby program at Charleville.

**Greenhouse gases**

It is estimated that about 16% of Australia’s total net greenhouse gas emissions originate from the farm sector. Of this 16%, 71% is contributed by ruminant livestock such as cattle and sheep emitting methane gas. Methane is a product of ruminants, and kangaroos are not ruminants. Consumption of kangaroo meat instead of beef or sheepmeat is therefore very greenhouse friendly.

A recent report by Greenpeace on global warming stated that reducing beef consumption by 20 per cent and putting Skippy on the dinner plate instead would cut 15 megatonnes of greenhouses gases from the atmosphere by 2020.

**Quality**

A higher and more consistent quality of kangaroo meat may result, from harvesting processes, chiller management, and an improved feedback and traceback system. An improved traceback system is currently being developed for the Conservancy, including GPS and data logging on a paddock and property basis.

Also, if kangaroo harvesting within the Conservancy is organised by a combination of pastoralists and harvesters with some form of joint control of chillers, one of the benefits may be improved quality control and an improved product to market.

**A3.4 The Role of this Study**

The key role of the study is to identify the characteristics of markets for kangaroos from the Maranoa conservancy and to support the establishment of processes to supply those markets. We need to focus on the views of consumers to direct the Conservancy focus, particularly the attitudes towards activities and products that are associated with ‘net conservation gains’. We need to explore the reaction to a conservancy or regional brand to promote the sustainable harvest of kangaroo meat from the Conservancy (and potentially any other products).
Appendix 4: Profile of Firms Interviewed in Market Research

A4.1 Key Findings

Key findings from interviews conducted with restaurants, caterers, food service firms (including game meat suppliers to restaurants and gourmet butchers), 5 star hotels, gourmet retailers and supermarkets included the following:

- Quality is the dominant driver in purchasing new food products. Firms need to be assured of quality and consistency.

- For some, the environmental focus is valuable due to the positioning of the business or because of increased interest from consumers. However, the Conservancy product would need to be positioned primarily as gourmet and secondly as an environmental brand.

- Game meat demand is fashion driven. Without consumer interest and supporting promotion, it will be very difficult to establish the new products.

- Game meat suppliers see the product as a specialist item and are seeking exclusive rights to supply in their state.

- Kangaroo is seen as a niche product already and some felt that trying to establish a new niche product in this thin market would be too difficult.

- Supply of kangaroo meat at present in unsophisticated packaging sends the message that kangaroo is a commodity product. Clear messages are needed about the differences the new product offers. To achieve wider levels of interest and support, the quality and gourmet positioning will be the main driver. Few are interested in a product that is only differentiated by the conservancy approach.

- Considerable effort and marketing resources will be needed to support the establishment of the product. This includes direct promotion to buyers and chefs as well as promotion in gourmet magazines and other media. A link to a known chef or existing gourmet brand would assist the product to establish.

- Comparative pricing with existing supplies is important in the establishment phase of the products.

- Consistent availability of supply is important for some firms (large catering firms and some supermarkets) but not for others.

- Working with a panel of chefs and businesses to trial the new product will provide valuable feedback in the product development stage. This approach can also be used very effectively to test marketing, packaging and positioning for the new product.

Feedback from interviews are summarised in Appendices 5 and 6. Results are based on a small sample of firms but themes raised are consistent.
A4.2 Current Profile of Purchasing Kangaroo Meat

Firms interviewed were asked to provide information on their current purchase profile of kangaroo meat.

| Of the organisations surveyed, 15 currently buy kangaroo meat. |
|Volumes varied with some organisations buying/selling 8 kilos of kangaroo meat per week up to 1,000 kilos.|
The prices paid for kangaroo meat purchased varied from $7.60 per kilo to $15.50 per kilo.

The type of kangaroo meat that firms currently used, purchased or sold included the following:

- Strip loin.
- Fillet.
- Rump.
- Tail.
- Forearm.
- Backstrap.
- Denuded backstrap.
- Sausages.
- Hamburgers.
- Prosciutto.

A4.3 Quantity Sold

The quantity of kangaroo meat sold or purchased by organisations surveyed varied according to size and type of operation. The largest users of kangaroo meat included one food service firm (up to 1,000 kilograms of kangaroo per week) and one supermarket selling 1,000 kilograms of kangaroo each week through supermarket outlets.

The profile of quantities used or sold on a weekly basis included the following:

**Restaurants**
- 8 kg to 12 kg per week.

**Hotels**
- 2 kg per week
- 15 kg to 20 kg per week.

**Gourmet Retailers**
- 20 kg per week for sale in selected affluent suburbs.

**Food Service**
- 10 kg per week.
- 750 kg to 1,000 kg per week.
- 10 kg per week.
- 400 kg to 500 kg per week.
- 400 kg to 500 kg per week
Supermarkets

- 100 kg per week.
- 1,000 kg per week.

A4.4 Price Profile

The price per kilo paid for kangaroo meat varied from a low of $6 to $7 per kilo through to a high of $14 to $16 per kilo.

The price per kilo that businesses reported paying included the following:

Restaurants
- $14 per/kg direct from the processor.

Hotels
- $15.99 per/kg.
- $7.60 per/kg.

Food Service
- $10.60 per/kg.
- $13 per/kg to $14 per/kg for premium cuts and $5 per/kg to $6 per/kg for lesser cuts of meat.
- $8.50 per/kg to $15.50 per/kg depending on the cut.

Supermarkets
- None of the supermarkets would disclose the price of the kangaroo that they purchase.
Appendix 5: Reaction from Retail, Food Service, Restaurant and Supermarket Firms to the Conservancy Concept

A5.1 Reaction to the Environmentally Branded Kangaroo Product from the Maranoa Conservancy

Participants in the research were provided with the following brief outline of the conservancy product:

Deborah Wilson Consulting Services is conducting market research to assess potential market demand for niche production of high quality kangaroo meat under an environmental brand.

The Maranoa Wildlife Conservancy which is west and north of Roma in Queensland has been formed by a group of pastoralists, mainly cattle producers to sustainably manage the region’s kangaroo population, produce kangaroo meat and promote biodiversity among wildlife.

The Conservancy product will represent approximately 2% of kangaroos culled annually within Australia and will offer these benefits over existing kangaroo meat:

- **Improved Product Quality** – more consistent and higher quality kangaroo product as a result of improved harvesting processes (chiller management, improved traceback systems using GPS and data logging)
- **Environmentally Sustainable** – the conservancy will use an environmental management system – managing the stock load on properties and preserving the existing environment. A number of the conservancy landholders are ISO14001 Australian Land Management System accredited.
  
  Another benefit is that encouraging kangaroo consumption instead of beef consumption can reduce greenhouse gases.
- **Increased Food Safety** – kangaroos will be harvested using quality assurance systems including health, hygiene and food safety.
- **Humane Harvesting Methods** – the size of the region allows wild kangaroos to be harvested in the most humane method possible.

The research will cover:

- Interest in Conservancy brand kangaroo products.
- Types of kangaroo products preferred.
- Key factors that would encourage use of the Conservancy brand kangaroo.
- Information needed about the Conservancy brand kangaroo.

There were varying levels of support for the concept – some organisations saw limited potential for the product while others saw considerable opportunity for the product.

Support for the concept of environmentally branded kangaroo differs. Those who saw the concept as a positive initiative have stressed the importance of branding and supporting the brand to successfully establish and market the product.

Those who do not see value believed that the current supply of kangaroo already has good environmental credentials. Others felt it would be too difficult to
differentiate the new product from the existing supply of kangaroo.

The feedback participants provided on their initial reaction to the concept included the following:

**Restaurants**
- The concept is ‘silly’. Unless the kangaroo were farmed, the product would not be any different from the current supply.
- The restaurant supported the concept. The brand is the most important aspect for success in the marketplace.

**Caterers**
- The firm does not know enough about the current supply of kangaroo to make a comparison.
- The firm is unsure about the concept. There is not enough demand for the current supply of kangaroo meat.

**Hotels**
- The hotel has no problem with the current supply which is highly accredited. Tenderness of the meat is the most important attribute of the product.
- The current process is already well managed and approved.

**Gourmet Retailers**
- Kangaroo is a sideline product. The firm thought the new product would require significant investment for it to be successful.
- There will be no demand for the new supply as it will be more expensive than the current product and price is important in the kangaroo market.
- The concept is a good idea providing it is heavily promoted and well managed.

**Food Service**
- The concept is interesting but success would be difficult to achieve.
- Consumers do not see the current supply as being polluted or inhumanely harvested.
- The concept is valid. Having the trace back capability is important.
- The concept is not viable. The production costs involved in the concept will reduce any profit margin.
- The current volumes of kangaroo sold would not sustain the new branded concept. The inconsistency in supply of the current product has lead to a reduction in the amount the firm sells.

**Supermarkets**
- There is room in the market for the environmentally branded kangaroo concept. The current good publicity surrounding kangaroo means that the timing is right.
• The concept sounds good. The current supply of kangaroo can not meet the demand for kangaroo in the market.

• It is a positive initiative for industry advancement.

• The concept sounds good.

A5.2 Environmentally Branded Kangaroo versus Existing Supply

Some felt that the existing supply of kangaroo already has an environmental brand. Others were not familiar enough with the existing supply to make a comparison.

Some of the firms surveyed believed that the new brand would compare well and would find a place in the market.

Feedback on the comparison between environmentally branded kangaroo and the existing ordinary supply of kangaroo meat included the following:

Restaurants

• The ordinary kangaroo supply is environmentally branded. The current supply has the organic tag, can be exported to the EU and is considered very healthy.

• The environmental brand would need to have the backing of a face or a chef.

Caterers

• The firm is not familiar enough with the ordinary kangaroo supply to compare the two.

Hotels

• The hotel’s preference for kangaroo meat would be based on the price.

• The price of the product is what matters to the hotel. The environmentally branded meat would need to be price competitive.

Gourmet Retailers

• The current kangaroo supply is good. The current supply is government regulated and there is export quality meat available.

• The environmental kangaroo meat sounds like a good concept, however the organisation is not familiar with the current supply.

• The environmental brand name of the new variety would be marketable.

• There must be a protocol attached to the environmental brand.

Food Service

• The firm would need more information to make a judgement.

• The environmental branding would be a contradiction, as the ‘greenies’ do not want any kangaroo harvesting to occur.
• The environmental brand would need to be significantly different from the current supply.

_Supermarkets_

• Any brand related to the environment would be popular with customers.

• An environmental brand would work in the marketplace.

• The firm has no issues with the current process of kangaroo supply. The industry appears well organised and controlled.

_A5.3 Value of the Environmental Brand_

| Some felt that the current product is already environmentally managed and environmentally branded – the new product would not be sufficiently differentiated. | Others felt that there is strengthening consumer interest in environmentally branded kangaroo. | Some were concerned about the complexity of getting the message through to consumers – this could be difficult to do on a hotel menu. |

There are differences of opinion on the value of an environmentally branded kangaroo. The key issue will be the ability to successfully differentiate the environmentally branded kangaroo from the existing supply, which many regarded as being managed on an environmental basis.

Feedback on perceived value of sourcing environmentally branded kangaroo included the following:

_Restaurants_

• The current product already is environmental.

_Caterers_

• Stability in supply and product quality assurance is more important to the firm. The organisation has a food safety system which has to be used by suppliers.

• The environmental brand would be valued by the firm and the customer.

_Hotels_

• The firm previously had organic products which customers did not value.

• There is not enough room on the menu to pass on information about the product to customers.

_Gourmet Retailers_

• The firm is yet to test whether customers value environmental branding.
• Customers would value the environmental branding to some degree. The price of the product would be very important.

• A big emphasis must be put on product quality.

• There is currently some interest from the firm’s customers in environmentally branded products.

**Food Service**

• The firm is not sure how the environmental brand is valued by customers.

• The current supply of kangaroo is environmentally branded.

• The current product is environmentally managed and organic.

• ‘Sourcing kangaroo meat environmentally would not be important to our customers’.

• The environmentally branded kangaroo should be highly regarded by the customer. Sustainable farming is very important to the firm.

**Supermarkets**

• The environment is a priority to the consumer.

• Customers would value environmentally branded kangaroo.

• The firm is unsure how customers value the environment. Price will be a key influence.

• The firm has confidence in the merits of the existing industry and is not looking for an improved model for kangaroo harvesting.

**Benefits of an Environmental Brand**

The benefits that the environmentally branded kangaroo needs to deliver to significantly differentiate this kangaroo meat from existing kangaroo product focused on quality and a clear, positive environmental ‘story’ to support the branding.

Feedback on these differentiating benefits included the following:

• The only way to produce a different product would be if the kangaroos were fed differently e.g. corn fed chickens.

• Improved quality and consistency.

• Tender and uniform in portion size.

• Tenderness must be the differentiator between the two brands. Kangaroo meat is too tough.

• Advertising must be the differentiator between the two types of kangaroo meat. People need to be aware of the new brand.

• The environmental brand must have a unique packaging. Customers of gourmet retailers would need to be aware that the product is different. The customers would need to be educated about the new brand.

• Information on where the new brand comes from and the full story about the new product.
Harvested from a more environmental source, promote animal welfare and be a cleaner product.

The product needs to be more uniform than the current supply.

Land management is important in differentiating the products.

The environmental brand needs to have a superior product quality and should be better promoted than the current supply.

Improved level of quality and consumer confidence in the product’s integrity.

Product tracking and traceability will be the only difference between the two types of kangaroo meat.

Some felt that the new brand will not be different from the current supply as the kangaroos are still wild.

**Minimum Differences**
The minimum differences that market representatives would need to see in the product to support a distinctive environmentally branded kangaroo were not easy for market representatives to define.

Restaurants, caterers and hotels had difficulty specifying a minimum level of differentiation needed. Others highlighted that marketing, merchandising, packaging and labelling all need to be different from the current supply.

The environmentally branded product must be demonstrated to be superior in quality and packaging.

**Importance of Sustainable Yield**
Views on the importance of sustainable harvesting varied – for some organisations, it is very important but for others, it is unimportant.

Supermarkets more consistently emphasised the importance of sustainable harvesting and the fact that consumers will expect this sustainability.

Feedback on sustainable yield from individual firms included the following:

**Restaurants**

- Very important - the current supply of kangaroo is harvested sustainably. The kangaroo quota for harvesting has never been filled.

**Caterers**

- Very important - sourcing products that are harvested sustainably is a company wide policy.

- Very important.

**Hotels**

- Not important to the firm.

- Very important.

**Gourmet Retailers**

- Very important.
Food Service

- A good idea.
- Conservationists would not be pleased if any kangaroo harvesting is occurring.
- Not important.
- Not important - the firm is not aware that kangaroo numbers have an impact on other wildlife.
- Very important for the future.

Supermarkets

- Extremely important and very relevant to the customers.
- The public would not know.
- Very important.

A5.4 Quality, Consistency, Price and Supply

Representatives provided feedback on:

- Expectations of product quality and consistency.
- Pricing expectations.
- Supply requirements.

The majority felt that it was important for the new environmentally branded kangaroo to be at the same pricing level as the current supply. Some felt that the price could be increased once the brand or the product had become more strongly established. In raising the price it will be important to develop a significantly differentiated product in the minds of consumers based on quality.

The market expects the product to be of consistent quality and be a tender, high quality product.

Feedback on expectations for quality, consistency and price of the new environmental brand of kangaroo meat included the following:

Restaurants

- The business would not pay any more for the new kangaroo meat. The current product is very good.
- Product quality is very important.

Caterers

- Product quality and consistency are very important.
Hotels
- Product availability is most important, followed by quality. The product must be uniform in size.

Gourmet Retailers
- The product quality must be very specific.
- The environmentally branded kangaroo meat needs to be a better quality product with a similar price to the current supply. In the past, the firm was selling a branded emu meat. When the supplier raised the price of the emu meat, the demand for the product fell significantly.
- The environmental product must be as good as or better in quality than the current supply of kangaroo meat.
- Quality, consistency and price should be the same as the current supply of kangaroo meat.

Food Service
- The new environmentally branded product can not be too expensive or it will struggle to sell.
- The new product must be uniform, consistent and tender.
- The new product will be hard to sell at a premium price and would be limited to restaurants. The product needs to have packaging, branding and history.
- The product must be consistent and uniform.

Supermarkets
- The price can not be different from the ordinary kangaroo meat.
- Quality and price go hand in hand - the market must be tested. The current product is well packaged and priced with a mark up.
- Value for money is very important when releasing a new product.
- The quality, packaging, price and consistency must be as good as the current product.

A5.5 Pricing Profile of the Environmentally Branded Kangaroo
Representatives surveyed were asked if they would be prepared to pay a slightly higher price for the environmentally branded kangaroo, and by what percentage.

Of the 19 firms surveyed 18 indicated that they would be willing to pay a higher price for the environmentally branded product. Firms were willing to pay between 1% and 20% more for the environmental brand.

For many firms the price of the product would be determined by the quality of the kangaroo meat.
Of the participants surveyed only one indicated that they would not pay any more for environmentally branded kangaroo than the current supply. Feedback on perceived value of sourcing environmentally branded kangaroo included the following:

**Restaurants**
- The firm would not be prepared to pay any more for the new branded kangaroo meat as the current supply is good quality meat.
- The firm would be willing to pay a slightly higher price for branded kangaroo meat.

**Caterers**
- Up to a 1% premium for an environmentally branded product.

**Hotels**
- The firm would pay more for the branded kangaroo. The premium the firm would be willing to pay would depend on the product quality. The meat must be uniform.
- A slightly higher price for the branded kangaroo meat but the price increase could not be significant.

**Gourmet Retailers**
- The price would be determined by the quality of the product.
- The price of kangaroo meat is cut dependent. If the current supply of kangaroo is $8 per/kg and if the branded kangaroo were $11 per/kg, the market would not sustain the new product.
- 10% more for an environmentally branded kangaroo meat.

**Food Service**
- No more than 15% extra for environmentally branded kangaroo meat.
- The firm would purchase the environmentally branded product if the product had a premium on the price.
- The price will be determined by the product quality.
- The price must be competitive with the current kangaroo supply.
- Quality, consistency and the strength of the brand within the market place will determine how much the firm is willing to pay for the branded kangaroo meat.

**Supermarkets**
- Pay slightly more for an environmentally branded product. However, an increase in price of more than $3 per/kg would be an issue.
- $4 to $5 more per kilo of the branded kangaroo.
- Up to 10% more for the branded product.
- The firm would only pay more for the environmentally branded product if it was justified and the increase could be passed on to the customers.
A5.6 Information Needs

The research covered feedback on the information requirements that gourmet retailers, hotels, caterers, restaurants, food service firms and supermarkets would need about the supplier as well as the information that consumers would want to know about environmentally branded kangaroo.

Businesses purchasing environmentally branded kangaroo want information on how sustainable harvesting is managed, credentials of the supplying organisation, firm ownership, food quality and system capabilities – a full profile on the operation, its capabilities and the benefits it can deliver.

These firms felt that consumers would want information on the origin of the product, nutrition and health information (confirmation that it is a healthy product), information that kangaroo is tender and of good quality.

The information that firms would want to know about an environmentally banded kangaroo product included the following:

- The credentials of the people behind the project.
- Company ownership.
- The branding is the most important aspect of the product if it is going to be successful in the market.
- The processes involved in producing the standard product and details on how the product is kept.
- Where the product comes from, cut information and what the animal has been fed.
- The ‘where, how, what and why’ of the new product.
- How kangaroos are sustainability harvested.
- All the information available that will help the firm in marketing the product.
- The product consistency and supply.
- Product accreditation.
- Product specification sheets similar to the information provided about beef and free range pork. The information would need to detail the region and age of the product.
- The differences between the environmental brand and the conventional product.
- All the relevant information available.
- Information that can deliver a commercial benefit to the firm.

The information that firms believed consumers would want to know about the environmentally branded kangaroo product – what the brand needs to say to consumers - included the following:

- Nutritional and health aspects of the product.
- Consumers already understand that the current product is lean and healthy.
• Where the product comes from, cut information and what the animal has been fed.
• The product would need a recognised brand.
• Consumers will want the ‘full story’ about the new product.
• The firm needs all the product information so that the staff can answer the questions customers have about the product.
• Information on the tenderness of the product as there is a perception that kangaroo meat is tough.
• Details of any accreditation the product has.
• Knowing that the brand is of a better quality than the current kangaroo supply.
• The consumer would require all the information to be on a label at the point of sale.
• Benefits of the product including information that the product is healthy and environmentally friendly.
• The environmentally branded product needs to be identified as significantly different from conventional kangaroo.

A5.7 Uptake of Environmentally Branded Kangaroo

| Overall, 14 of the firms surveyed were interested in buying environmentally branded kangaroo. |
| 16 of the firms surveyed were interested in trialling environmentally branded kangaroo. |
| The types of kangaroo products and pack sizes of greatest interest included pack sizes of up to a kilo for loin, fillet, backstrap, rump and sirloin. |
| Supermarkets were also interested in mince, stir fry and sausages. |

Interest in Buying Environmentally Branded Kangaroo Products

Overall, 14 of the firms surveyed where interested in buying environmentally branded kangaroo. 5 firms were not interested. Feedback on their level of interest in buying environmentally branded kangaroo included the following:

Restaurants

• The firm is not interested. The current product achieves everything this product is attempting to do.

Caterers

• The firm is not interested in kangaroo meat at present but can foresee the market changing in the future.

Hotels

• The level of interest from the firm would depend on the final quality of the product.
The hotel would be interested in the product if the quality and price were right.

**Gourmet Retailers**

- The firm is not interested in environmentally branded kangaroo as the current product meets all the requirements of the firm.
- There must be a demand for the product among the customers for the firm to stock the environmentally branded kangaroo meat.
- The firm would purchase the kangaroo meat as customers often discuss sustainable farming when shopping at the business.

**Food Service**

- The firm would purchase the branded kangaroo as upper market restaurants would have a demand for it. Restaurants are now purchasing a lot of branded lamb.
- The firm would be interested in the product.
- The firm would be interested in the kangaroo meat if the price was competitive.
- The firm is sceptical about the product. Branded beef took two years to introduce into the marketplace. Kangaroo would require a lot more time and effort.

**Supermarkets**

- As an independent supermarket, stocking different and new products is a point of differentiation for the firm.
- The firm is very interested in stocking the branded kangaroo meat.
- The firm is moderately interested in trialling the product.
- The supermarket would require more information on the kangaroo meat to make a decision.

**Trialling Environmentally Branded Kangaroo**

Sixteen of the organisations surveyed were interested in trialling environmentally branded kangaroo. The reasons why firms would trial the product included the following:

- General interest in the product.
- To test customer demand.
- To gain customer feedback.
- Trialling based on the merits of the product.

The reasons why firms were not interested in trialling the product included the following:

- Failure of a previous trial of kangaroo meat.
- The current supply of kangaroo is very good.
**Perceived Targets for the Product**
Firms believed that restaurants, upmarket hotels, gourmet butcher shops and supermarkets would support a trial.

One supermarket representative thought that independent supermarkets would be more likely to promote branded kangaroo than the larger chains.

**Pack Sizes Required**
The kangaroo products and pack sizes that firms would want in an environmentally branded kangaroo included the following:

*Restaurants*
- Sirloin, fillet, rump, tails, shoulder and forearm in 250g to 500g packs.

*Caterers*
- Quantities would vary from very small portions to bulk sizes.
- Quantities would vary depending on the purpose the firm is ordering the kangaroo meat for.

*Hotels*
- Loin cuts.
- 1.5 kg to 2 kg packs of kangaroo which the hotel butcher trims on site.

*Gourmet Retailers*
- 500g packs.

*Food Service*
- 1 kg pack sizes of loin and rump.
- 200g, 500g and 1 kg pack sizes of loin, back strap, fillet, tail, sausages, hamburgers and rump.
- The firm purchases kangaroo in cartons containing ten 1 kg packs to a carton.
- 650g to 1 kg packages of sirloin and fillet.
- 1 kg packs of loin fillets, back strap, denuded back strap and topside.

*Supermarkets*
- Smaller pack sizes of kangaroo are better - 200g to 300g packs.
- The supermarket purchases kangaroo in 300g to 500g packages of fillet steaks, sausages, stir-fry and mince.
- The firm purchases pre packaged value added kangaroo steaks.
- Pre packaged boneless leg, fillet steak, sausages and mince.
Interest in Product Given Supply Constraints

Firms surveyed were asked whether they would still be interested in environmentally branded kangaroo product if the supply was limited – the Conservancy represents only approximately 2% of the total market.

Some firms serving larger markets such as food service and supermarkets consider that availability of supply could be a limiting issue. However, other firms in these two categories did not believe that a limited supply would be an issue.

The feedback from firms on whether interest in the environmentally branded kangaroo would be affected if supply is limited, included the following:

**Restaurants**
- No effect – would still purchase the product.

**Caterers**
- Still interested in the product if supply was limited.

**Hotels**
- The supply must keep up with demand otherwise the firm would not stock environmentally branded kangaroo.
- Not interested if the supply was limited.

**Gourmet Retailers**
- Not interested if supply was limited.
- Still interested if the supply was limited.

**Food Service**
- Interested if supply was limited as the ordinary kangaroo supply is also limited.
- A limit on supply would be a major issue for the firm. Marketing the product would be pointless if there is no supply.
- Not interested if the supply is limited.
- The firm would need to know specifically how much kangaroo meat is available.
- Still interested if supply was limited.

**Supermarkets**
- Two would be interested if the supply was limited.
- Two were not interested if supply was limited.

Minimum Supply Required

The minimum quantity of environmentally branded kangaroo that needs to be available to support the firm buying the product regularly varied from a few kilograms a week up to 3 tonnes per week. Examples of requirements included the following:
- There is a large variation in supply. The firm could order $20 to $2,000 worth of kangaroo meat per week for the 150 sites that the business services (caterer).
• About 2 kg of kangaroo a week (hotel).
• 15 kg to 20 kg of kangaroo a week (hotel).
• 60 kg of trim kangaroo meat each month (gourmet retailer).
• 40 kg of kangaroo per month (food service).
• 2 and 3 tonnes of kangaroo each week. Currently there is a lot of demand for this type of product. The firm sells 1.5 tonnes of table pigeon each week (food service).
• Starting at 50 kg a week. The quantity of meat required would rise with demand from customers (food service).
• The minimum quantity of product required would be determined by the market. The quantity of meat supplied is very important. The firm promoted a branded beef which was very popular with customers. The company increased the level of supply to the firm, the meat became a commodity and the price dropped (food service).
• 5 cartons per week of kangaroo meat (supermarket).
• 100 kg of kangaroo meat each week (supermarket).
• Stores need to be able to order products regularly without having any unsupplied items (supermarket).

A5.8 Factors Prompting Purchase

| The exclusivity of the product, quality and a strong environmental brand would prompt a number of firms to purchase the product. |
| Consumer awareness and demand for the product would also be a key driver. |
| Product quality and, for supermarkets, price competitiveness, will be drivers of demand. |
| A number of firms would pay slightly more for an environmentally branded kangaroo product that is also a high quality product. |

The main factors that will drive demand for environmentally branded kangaroo include marketing the environmental credentials of the product, quality and successful branding. Feedback on drivers of demand for the new product included the following:

Restaurants

• Drought and the effect of climatic conditions on the supply chain will drive demand for environmentally branded kangaroo.
• Branding and quality.

Caterers

• The catering participants were unsure what would drive demand.
Hotels

- The drivers are difficult for the firm to determine. Organic meat failed in the restaurant.
- Consumer product awareness needs to drive demand.

Gourmet Retailers

- The price, novelty and current food trends.
- The product quality.
- Advertising.

Food Service

- Packaging and marketing.
- Point of sales material and brand recognition.
- Product image.
- Marketing.

Supermarkets

- Marketing the environmental aspects to consumers.
- Product quality and marketing.
- Consumer awareness of the product’s benefits.

Prompts for Firms to Purchase
Consumer demand is the main factor that would prompt firms to purchase the environmentally branded kangaroo. Other factors include the quality of the product, successful branding, trialling and market acceptance.

Detailed feedback on the points that would encourage firms to buy environmentally branded kangaroo product included the following:

Restaurants

- A shortage of other kangaroo product and a convincing argument to purchase the product.
- Consumer demand.

Caterers

- Market movements and retail opportunities.

Hotels

- The fact that the kangaroo meat is rare and different.
- Knowledge of the product.
**Gourmet Retailers**

- Customer demand.

**Food Service**

- If the product looks good and is packaged well.
- Customer demand.
- Tenderness and price.
- Customer demand. A trial with 100 kg in selected butcher shops would be used to determine demand.
- Demand and price.

**Supermarkets**

- The product quality and price.
- A successful trial of the product.
- The organisation must be convinced of the commercial benefits of stocking the product.
- If the firm thought the product had potential.

**A5.9 Marketing and Supply Support**

A signature branding, proactive and targeted marketing, point of sale leaflets and an advertising campaign were recommended marketing strategies.

Market testing the product is also an important strategy.

Suggested marketing support needed to promote the environmentally branded kangaroo product included the following:

**Restaurants**

- The product must be marketed in health food stores, organic stores and upmarket supermarkets.
- The product must have a face – a celebrity or a chef. The company must educate each chef on the best way to cook the kangaroo meat to ensure the final product that reaches the consumer is of maximum quality.

**Caterers**

- The product needs to be marketed using point of sale advertising, table talk, posters, flyers and a website.

**Hotels**

- The supplier of the product needs to know the product in great detail and be contactable at any hour of the day.
• The branded meat must be advertised in food magazines to create awareness and demand for the product.

**Gourmet Retailers**

• In store promotions that educate the customer on the quality and traceability of the new brand of kangaroo meat.

• Advertising to educate the consumer on the attributes of the product.

**Food Service**

• Good packaging and branding will help to market the kangaroo meat. A lamb supplier from Junee has had increased sales since changing the packaging of their product.

• The packaging and presentation of the product is important. The meat should also be marketed with recipes.

• Effective packaging and flyers with cooking hints.

• Advertising campaign and table talkers. The product should be trialled with 10-15 chefs to gain feedback on the taste and quality.

**Supermarkets**

• Leaflets and handouts which can be passed on to the consumer.

• Effective branding and product leaflets.

• Proactive marketing is needed to create repeat sales.

• Provide information about the benefits of environmentally branded kangaroo.

**Exclusivity**

For 8 of the 19 firms surveyed, knowing that other firms were also using the product would have no impact on their decision.

Many firms felt that it was a positive development that other firms were using the environmentally branded kangaroo. A few firms wanted exclusivity of the brand. Of the 4 supermarkets that participated in the survey, 3 felt the knowledge that other firms are using the product would positively impact on their decision to purchase branded kangaroo meat.

The fact that other firms are using the product demonstrates a market demand. Some felt that exclusive distribution in a region is needed as the market would be very small.

**Kangaroo Meat and Greenhouse Gases**

The majority of firms surveyed felt that the message that eating kangaroo reduces greenhouse gases is a positive and important message.

Three of the supermarket contacts felt that the reduced greenhouse impact of kangaroo meat is not an important message to customers.

**Promoting the Environmental Brand**

The majority of firms surveyed (16 out of 19) reported that they would promote the environmental brand to their customers.

One hotel currently stocks Naturoo kangaroo meat and promotes this brand.
Supply Arrangements
Some firms wanted a central or single contact point for supply arrangements.

Supermarkets were looking for a more sophisticated account management and supply arrangement to fit in with existing supply chain arrangements.

Feedback on the contact points and supply arrangements that firms would need from the Conservancy if they bought the environmentally branded kangaroo included the following:

Restaurants
- Multiple supply points would be required.

Caterers
- Distribution would need to be through the existing supply arrangements in Queensland and the Northern Territory. The firm has 6-9 butchers within this region.
- The organisation would require a number of distributors to purchase the product.

Hotels
- One contact point and an account with direct billing.
- Supply arrangements are up to the supplier. The firm uses multiple contact points in their supply arrangements.

Gourmet Retailers
- The contact points are up to the supplier to manage.
- One contact point is the preferred for simple supply arrangements.

Food Service
- Order every month and have direct contact with the supplier. Kangaroo is difficult to source at present.
- Contact from the supplier directly on a regular basis.
- The product would need to be delivered to a depot in Melbourne by refrigerated transport. The price would be determined at the point of pick up from the depot.
- Supply arrangements need to be very simple. The firm would require marketing information, product fact sheets and table talkers.

Supermarkets
- The supermarket has a distribution arrangement with a main distribution company.
- Delivery once a week in vacuum packed packages.
- An account manager, a store contact person and direct to store deliveries.
A5.10 Priorities for the New Product

Participants in the research rated the strength of the opportunity for the environmentally branded kangaroo at 2.8 out of five on a scale where one is poor and five is very good – just below average. Highest ratings were recorded for food service organisations (3.5 out of 5), hotels (3.3 out of 5) and supermarkets (2.9 out of 5).

Key issues that need to be addressed in gaining market support include high quality branding, delivering a high quality product, good promotion of the nutritional and environmental benefits of the product and raising public awareness of the benefits of the product.

Important Priorities
The important priorities for the new product to gain support in the market included the following:

Restaurants
- Convincing data on product quality.
- Branding and quality.

Caterers
- Promoting the health benefits of the product will be an important priority if the product is to gain market support.
- Product promotion.

Hotels
- Product quality.
- Education of the consumer on the environmental benefits of the product.

Gourmet Retailers
- Product quality and the promotion of environmental aspects.
- Education.

Food Service
- Packaging is important if the product is to be supported and demanded by the market place.
- Continuity of supply and clear messages on the product.
- Product quality.
- Simple eye catching branding.
- Product marketing, packaging, consistency and branding are all important if the product is to be successful in the marketplace.
Supermarkets

- Price, marketing and differentiation on packaging.
- Good branding and a clear message.
- Convincing the consumer of the benefits of the product.
- Public awareness of environmentally branded kangaroo.

Strength of the Opportunity

Firms were asked to assess the strength of the opportunity for the new product on a scale of 1 to 5 where 1 is poor and 5 is very good. Sector feedback included the following:

Restaurants (2.0 out of 5)

- The environmentally branded product is not necessary as the current product is already environmentally friendly.

Caterers (2.0 out of 5)

- An education process is required for kangaroo in general and not just the environmental brand to be successful.
- The product will not be successful until consumers have a good understanding of the product.

Hotels (3.3 out of 5)

- The environmental aspect of the product is not a big selling point.
- The project should be undertaken to change current farming practices.

Gourmet Retailers (1.5 out of 5)

- If there is currently no product like environmentally branded kangaroo on the market than the product has more chance.
- Customers discuss the environment and sustainability often in this region.

Food Service (3.5 out of 5)

- The product would be popular if correctly marketed.
- The product has not been demanded by customers and the current supply of kangaroo is considered environmental.
- The environmental aspect of the product is not important - eating quality is more important to the consumer.
- There is currently a good attitude towards the environment.
- The firm does not see any demand for this product in what is already a very small market for kangaroo meat.
**Supermarkets (2.9 out of 5)**

- The branded kangaroo meat would be difficult to sell to consumers and any uptake of the product would take time.
- The branded kangaroo could be popular among consumers. There is room in the market for another kangaroo supplier.
- The firm is not convinced that consumers would change their current purchasing habits.
- Kangaroo meat is widely accepted as an alternative protein source. The current supply only receives minor opposition.

Results show that there is some support for the product but that others are not convinced that the environmental branding will be an effective selling point for the product.

**Other Feedback**
Firms surveyed also provided the following feedback on the new product and opportunities for the new product:

**Restaurants**

- The current packaging of kangaroo lets the product down. The meat looks bloody and red puts off consumers in the domestic market. The restaurant was keen to forward its contact details to the organisation behind this research.

**Caterers**

- The project will require a lot of support and financial backing if the product is going to be successful.
- The chef does not think kangaroo meat is suitable for human consumption.
- Kangaroo is only used when specifically requested by clients. The firm will order kangaroo in upon request.
- The firm only uses a small quantity of kangaroo. The business thinks there is no market demand for kangaroo and would not value an organic or environmental kangaroo product. The firm would not pay more money for the product.

**Hotels**

- The chef has no intention of putting kangaroo on the menu of the hotel restaurant.

**Gourmet Retailers**

- The firm only sells 10 kg worth of kangaroo every four months so the product is not a priority.
- The business stocked kangaroo products about a year ago. Currently there is no demand for kangaroo.
- The firm does not stock any kangaroo as there is no demand for the product. This does not mean that another brand would not be successful if it had the marketing to increase demand.
• The business does not currently sell any kangaroo meat. There is a sign in the shop saying that the firm can get kangaroo and other game, however customers have never asked for kangaroo.

• The firm does not see a general demand for an environmentally branded product. There may be a demand within selected suburbs or high turnover areas. An environmental brand would not be valued. Currently export quality kangaroo is $20 per/kg to $25 per/kg. The new brand could not sell for more than the export quality kangaroo.

• The firm sells kangaroo prosciutto and chipolatas. The firm sells less than 100 kg of deli kangaroo products each year.

• The firm does not stock any kangaroo meat as the market for kangaroo in general is very small. The business thinks that consumers would be resistant to marketing of kangaroo products. The firm participated in an industry event where a cattle producer spoke of how the farmers should be changing to kangaroo. Consumers drive the market.

**Food Service**

• Organic products have failed in the market after 6 years. The kangaroo meat must be a simple product with good promotion and recipes.

• The firm requested that its details be forwarded to the company behind this product.

• The firm would not put any money behind this project.

• The firm does not have an opinion on kangaroo meat as the quantities sold are too small.

**Supermarkets**

• The representative of the firm does not wish to participate as they can not speak for the entire retail chain. If investors are interested in the project they may contact the representative from the firm directly to discuss the project. The contact does not want to influence any decisions.
Appendix 6: Consumer Focus Groups

A6.1 Key Findings

Two focus groups provide insights into consumer attitudes to kangaroo and to the new environmentally branded kangaroo. The key findings from these groups included the following:

- Regular buyers of kangaroo liked the meat and saw it as providing variety. However, people would generally buy much more beef and chicken ‘as that’s what we grew up eating’.

- A few people in the regular user group purchased kangaroo because it was cheaper than other meat.

- People in both groups had noticed kangaroo more because it was now more widely available in supermarkets. Some had seen kangaroo prosciutto in delicatessens.

- Some found the gamey flavour of kangaroo very strong and would use marinades and spices to cut the flavour.

- People were aware that kangaroo meat is very lean, healthy and high in iron.

- Some non users were concerned about parasites and food safety because kangaroo was ‘wild like pigs and rabbit’. Others felt confident that food safety practices and supermarket standards would ensure that kangaroo is safe to eat.

- Although people knew that kangaroo is used for pet food, kangaroo is becoming more popular and is seen as a lean, healthy meat.

- People were unaware of the numbers of kangaroo in Australia.

- People in both groups were interested in more information about how to cook kangaroo to get tender meat and were interested in recipes.

- Consumers were interested in the conservancy or environmental brand but found it a difficult concept to grasp compared with existing or known categories such as ‘organic’ and ‘free range’. The fact that cattle and sheep are still stocked and that land might also be cleared did not make it clear what the net gain would be to the environment.

- Consumers were interested in gourmet and quality products and felt that the new brand would have to have this feature to gain support.

- Consumers were interested in the ‘environmental story’ and wanted a clear and simple story that told them of the benefits. The fact that the product is locally produced and the company locally owned is important.

- People wanted to be assured of quality and food safety of the new product.

- Although people did not want to know about the details of how kangaroos were harvested, some women in both groups wanted to be assured that joeys were not left to die and that natural groupings of kangaroo were not adversely affected by culling.

- People would be prepared to pay a higher price for a gourmet, environmental product although some did not understand why it should cost more - kangaroos are wild and were harvested in the same way as other kangaroos.
• Strong brand marketing, promotions in gourmet magazines, in store promotions, recipes and accompanying spice/flavouring packs were suggested by consumers to encourage uptake of the new product.

A6.2 Focus Group with Regular Users of Kangaroo Meat

Current Consumption Patterns
The nine people in the focus group were asked to provide information on the meat they purchased the last time they shopped. Feedback included the following:

• Chicken and kangaroo.
• Lamb, chicken schnitzel, mince, kangaroo rump and kangaroo sausages.
• Beef, chicken, lamb and kangaroo.
• Salami, ham and chicken.
• Ingredients for possum pie and goat (this woman was preparing a special meal).
• Lamb, beef, kangaroo.
• Mince, beef and chicken.
• Ham, pork, chicken and kangaroo.
• Lamb, chicken and steak.

People were asked how often they ate kangaroo. People reported eating kangaroo:
• Once a week.
• Kangaroo is cheaper than other meat – two to three times a month.
• Twice a month.
• One person had bought kangaroo at a restaurant.
• Once a month – the deli this person went to sells smoked kangaroo prosciutto.
• Another person in the group mentioned that a South Australian company makes kangaroo biltong.
• Two people purchased kangaroo once a month.
• Once a week.

Recipes and Cooking Approaches
People were asked to comment on the recipes and cooking approaches they used when cooking kangaroo:

• Kangaroo has been affected by the drought – it is not farmed.
• One woman fried kangaroo, cooled it and put it in the fridge. She had a daughter with an iron deficiency and the family was able to cut slices from the cooled, cooked kangaroo. This family ate these kangaroo slices as a snack and in salads.
• Sausages – they are easy to cook and lean. The taste is ‘not too steaky’.
• One person commented that kangaroo can taste a bit like liver.
• Using kangaroo meat in spaghetti Bolognese.
• Using kangaroo mince in Mexican dishes such as nachos, burritos and tacos.
• One person marinated kangaroo for a few hours in wine to make the meat more tender.
• One person had eaten kangaroo at a restaurant and they served small fillets.
• One person felt that roasted kangaroo can be overpowering and a bit chewy.
• Kangaroo burgers.
• Kangaroo sausages.
• ‘Kangaroo is good on the barbecue.’
• One person’s friend has a beef burgundy recipe and kangaroo goes very well in this recipe.
• People commented that kangaroo can be cooked at a lower temperature. It is important not to cook kangaroo too long – it is important to rest it and let it bleed.
• Some felt that the odour of kangaroo was fairly strong. One person used a lemon juice and pepper dressing to cut the strong odour and taste.
• Another person used Middle Eastern spices including cumin to reduce the ‘gamey flavour’.

When commenting on the flavour, tenderness and toughness of kangaroo, people made the following comments:
• The taste can be a bit like offal.
• One person had been out in the bush and had shot and eaten kangaroos.
• One person found kangaroo tough ‘if I cook it at home’.
• Most people in the group agreed that kangaroo steaks were not too hard to cook. Sausages were also good.
• One person had tried venison ham which had been smoked and salted. She also felt that kangaroo would be good if smoked and salted.
• Some felt that kangaroo could be a pretty tough meat – based on the lifestyle of the animal.
• Kangaroo prosciutto is good.
• One person had tried kangaroo jerky and found that it had a strong flavour.
• Some people had no problem with the flavour although a few found it a strong flavour.
• One person slow cooked kangaroo with olive oil and red wine. Another person used a red wine marinade and also used kangaroo in shish kebabs.
• People agreed that kangaroo ‘does not look like regular meat’.
Five to six people in the group felt that kangaroo had a fairly strong flavour.

Comparison with Other Meats
People made the following comments when comparing kangaroo with other meats:
- It is like rabbit and venison – a game meat.
- Kangaroo meat is very lean and compares well to other meats because of its low fat content.
- Kangaroo sausages and mince are very good.
- Some people liked the dark colour of the meat.

Health, Nutrition and Other Benefits
People felt that the benefits of kangaroo included the following:
- The iron content.
- The lean meat. It slices well when cold.
- People commented that grazing animals had to be taken to an abattoir and at times there was stress involved. Kangaroos are killed on the spot and there is less stress.
- Kangaroos are not genetically modified.
- There are more trace elements in kangaroo meat.
- There are no antibiotics used in kangaroos. Some were concerned about use of antibiotics in chicken meat.
- ‘Kangaroos have a lighter footprint on the earth’ and there is no farming of kangaroos.

Disadvantages of Eating Kangaroo Meat
People felt that the disadvantages of eating kangaroo meat included the following:
- Perceptions that kangaroo is ‘pet meat’ or ‘Skippy’.
- One person sometimes cooked meals for guests and did not mention that it was kangaroo. For this person, it was a price consideration. However the guests never noticed.
- Kangaroos are on the Australian emblem.
- One person felt they were vermin like rabbits.
- A few people were concerned about the parasite issue – the meat is often still bleeding when cooked and people did not know whether parasites were an issue.
- Some are concerned that kangaroos are killed and not put in the fridge straightaway.
- A few had concerns about ‘dirty’ meat because the animals were wild and the way in which animals are harvested. Others in the group commented that all meat is covered by food safety regulations.
- One person in the group had shot kangaroos and commented that kangaroos are shot at night and refrigerated within 10 hours.
- Again a few people in the group raised the issue of parasites.
Coles has very high quality control on all of its food and would not sell kangaroo if it had parasites.

**Sources of Information on Kangaroo Meat and Recipes**

People used the following sources for information on kangaroo meat and kangaroo cooking and recipes:
- The CWA cookbook.

The Roma Meatworks sends kangaroos to Russia for meat supply.

Some animals are slaughtered in the halal method but some are concerned that this was not as safe as having a regular meat inspector.

Dieticians advise that kangaroo meat is healthy because of the low fat and the nutritional profile.

**Knowledge of How Kangaroos are Killed and Processed**

Some in the group did not know much about how kangaroos are killed and processed.

People in the group knew that kangaroos are not farmed and that they are culled.

Some people in the group knew that harvesters go out and use spotlights and shoot kangaroos at night.

There is an image of a ‘tough Aussie out there shooting kangaroos’.

One person commented that kangaroo harvesters are professionals and use refrigerated vans – there is a mother ship to take carcasses.

Only two people in the group felt that they did not know much about how kangaroos are killed and processed.

**Views on Wild Culling**

People made the following comments about wild culling of kangaroos:
- Some were concerned about joeys being left in the pouch when their mothers were killed – ‘cows are not pregnant when they kill them’.
- Only one young woman in the group wondered whether there was any farming of kangaroos.
- When people drive out west, they run over kangaroos.
- Most in the group had no problem with kangaroos being shot.
- Sometimes kangaroos are just shot for dog food.

**Awareness of the Kangaroo Population**

None of the people in the group knew the size of the kangaroo population. One person thought it was 30 million.

**Concerns over Humane Killing**

People in the group felt that shooting kangaroos was more humane than taking cows through a slaughterhouse. One person was concerned about shooting kangaroos in a limited area – did this affect the gene pool if large kangaroos were shot, leaving only smaller kangaroos.
Reaction to the Conservancy Concept
Participants were given an outline of the conservancy concept:

Deborah Wilson Consulting Services is conducting market research to assess potential market demand for niche production of high quality kangaroo meat under an environmental brand.

The Maranoa Wildlife Conservancy which is west and north of Roma in Queensland has been formed by a group of pastoralists, mainly cattle producers to sustainably manage the region’s kangaroo population, produce kangaroo meat and promote biodiversity among wildlife.

The Conservancy product will represent approximately 2% of kangaroos culled annually within Australia and will offer these benefits over existing kangaroo meat:

- **Improved Product Quality** – more consistent and higher quality kangaroo product as a result of improved harvesting processes (chiller management, improved traceback systems using GPS and data logging)
- **Environmentally Sustainable** – the conservancy will use an environmental management system – managing the stock load on properties and preserving the existing environment. A number of the conservancy landholders are ISO14001 Australian Land Management System accredited.
  
  Another benefit is that encouraging kangaroo consumption instead of beef consumption can reduce greenhouse gases.
- **Increased Food Safety** – kangaroos will be harvested using quality assurance systems including health, hygiene and food safety.
- **Humane Harvesting Methods** – the size of the region allows wild kangaroos to be harvested in the most humane method possible.

The research will cover:

- Interest in Conservancy brand kangaroo products.
- Types of kangaroo products preferred.
- Key factors that would encourage use of the Conservancy brand kangaroo.
- Information needed about the Conservancy brand kangaroo.

People’s reaction to the conservancy concept included the following:

- Quality is an important aspect.

- Some are concerned about the impact on joeys in female kangaroo pouches – some would pay extra if they knew that joeys were taken care of when the mother was killed.

- ‘It is a good spin to be ecologically sound.’

- It would be good if the meat is better – ‘I always think of parasites’.

- There is more effort gone into it.

- People in the group felt that it would be a positive thing to have environmentally branded kangaroo.

- One person felt that they would pay extra to not have the same dog meat handling of kangaroo. People are prepared to pay extra in a delicatessen.
Four people in the group were interested in the conservancy branded kangaroo and were prepared to pay 10% to 20% more for this kangaroo.

**Best Types of Kangaroo Product**

Consumers felt that the best types of kangaroo products for the conservancy or environmental brand included:

- Prosciutto.
- Smoked kangaroo.
- Something different – perhaps adding bush tomato or lemon myrtle in sausages.
- One person questioned whether sausages were a good idea – is it supposed to be cheap?
- Smoked kangaroo and kangaroo salami.
- Environmentally branded kangaroo should offer basic cuts – like organic meat.

People in the group discussed the fact that organic meat had a similar type of positioning.

One person was interested in kangaroo tail.

The branding could tell people how it is different – people understand what free range eggs are compared to ordinary eggs but it is harder to understand what the difference is with the environmentally branded kangaroo.

People knew that kangaroos are already free ranging.

Some felt that the environmentally branded kangaroo would be close in price to the ordinary kangaroo – there is no hand feeding of the kangaroos.

People acknowledged that they pay more for wild fish.

Some people also noticed other specialist meat such as camel, crocodile and emu.

**Benefits of the Conservancy Product**

The benefits the conservancy product needs to offer to prompt consumers to trial it and buy it on an ongoing basis included the following:

- Reliability – being able to buy the product and have reliable quality.
- Having a very healthy product.
- Kangaroo is becoming more mainstream – it is very healthy.
- A 20% higher price is still cheaper than other types of meat.
- Perhaps it could be used in McDonald’s burgers.
- One person suggested using it in meat pies – it promotes Australian pride.
- One person knew that kangaroo meat is exported to Russia and it is ‘just sold as meat’.

**Pricing**

People in the group reported that kangaroo meat sells for $6 to $7 or $8 per kilo.
**Brand Name**
The brand name needs to get across the following information to consumers:

- Local – western Queensland.
- Some thought has gone into it.
- Food safety.
- Food safety.
- The food is fit for human consumption and is safe.
- The environmental benefits.
- That it is a gourmet treat.
- Letting people know that shooting does not stress out the kangaroos. One person commented that cows can get very stressed. The group discussed this and decided that ‘they did not want to know about the killing process’.
- Let people know about the iron content.
- Information that the product stores well.
- Letting people know that the harvesting of kangaroos is not damaging Australia.
- Get the Heart Foundation Tick.

**Availability**
Consumers provided the following feedback on availability of the new product:

- Some want it available every day.
- People wanted to know when the product was available. People understood that fruit can be seasonal but did not associate seasonality with meat.
- One person in the group mentioned that slow food is all about choosing seasonally available food – this new product would fit in with slow food.
- Consumers wanted a frozen alternative available if fresh was not available.
- Smoking the kangaroo will give it a longer shelf life.
- Some people wanted to have that ‘hunter gatherer’ link and would feel that buying the product kept them ‘in touch with the land’.
- People suggested including packs of lemon myrtle seasoning and recipe cards with the kangaroo.

**Differentiating the Product**
Consumers wanted to know who the people are that will benefit from the product, e.g. is it an Australian owned farm?

People were more interested in supporting a local group of farmers versus a multimillion dollar business.

‘Does it link in with the indigenous community?’

People wanted to know what the benefits were to the land.

Were the producers local owners?
Trying and Buying the Conservancy Kangaroo Product
People were asked when they would try and buy the conservancy or environmentally branded kangaroo:

- Some would buy it when they had visitors.
- Buy it from the deli.
- One person made the comment that kangaroo meat is very dark and can get ‘lost in the black containers’.
- Kangaroo steaks are not flat like other steaks.
- Australia Day.
- The new product could be Cryovaced.
- In store promotions encouraged people – cooking the product and giving people a taste test.
- Ethnic festivals – often at festivals there are food from all nations but no truly Australian foods – perhaps the environmentally branded kangaroo can be promoted as Australian food.
- One person had an Australian food themed dinner party. She had cooked possum and had to get it from New Zealand. Possum recipes use half possum and half beef. Perhaps there is an opportunity to use the same approach with the kangaroo – half kangaroo and half beef.
- People buy chicken from the deli department of the supermarket. Environmentally branded kangaroo could also be sold in the same way.
- It is up to the restaurant whether they offer kangaroo. Restaurants offer very high quality meat, e.g. 1824 Steak, Bangalow Sweet Pork. The environmentally branded kangaroo can be promoted to restaurants in a similar way.
- Organic restaurants in capital cities would probably be interested in the product.

Important Messages
The most important messages to encourage people to order kangaroo meat more frequently at restaurants or buy it more frequently at supermarkets included the following:

- The conservancy message.
- Health and environment are the top messages.
- Where people can buy the kangaroo.
- Information on how to cook kangaroo and providing more kangaroo recipes.
- The quality assurance systems and food safety.
- Humane harvesting methods – however some did not want to know about this information.
- Sustainable management of kangaroos was of interest to some but not to others.
- Sustainable management of pastures and land was of interest to some.
- Sustainable management of wildlife was important to some.
Trying the New Environmentally Branded Kangaroo Meat
Four of the people in the group would be more inclined to try kangaroo meat, eat more or order it more frequently in restaurants if kangaroos were from a sustainably managed conservancy.

Monitoring Numbers
People felt that the conservancy approach does show a different approach to culling kangaroos and sustainable management.

Paying More
The majority of the people in the group felt that they would be willing to pay more if kangaroo was sourced from a sustainably managed land production system.

Priorities
The priorities and messages to encourage people to try and buy the environmentally branded kangaroo product included the following:

• It should be easy to get – available in a supermarket.
• Provide lemon myrtle and other seasoning with the kangaroo.
• Focus on the sustainability message – aboriginal people use all of the kangaroo.
• Some crops like cotton take too much water to produce. There has been a move to replace cotton with hemp. The environmentally branded kangaroo would be a more sustainable approach for the environment than beef.
• There is more sustainability in using kangaroos as the leather, bones and other parts can all be used.
• Some felt that kangaroo had a very strong flavour and this would need to be overcome. Providing seasoning such as lemon myrtle can cut through this strong flavour and taste which is repellent to some people.
• The sausages are fairly mild. Perhaps the group can donate sausages to school fetes and then let people know that they are kangaroo sausages.
• Perhaps get the Australian Boxing Team for the Olympics to eat and endorse the kangaroo.
• People wanted the convenience and ease of being able to buy the kangaroo. It must also be easy to cook.

A6.3 Focus Group with People Who Do Not Regularly Eat Kangaroo

Current Consumption and Attitude
At the start of the group people were asked to comment on the type of meat they had purchased last time they went shopping. Feedback included the following:

• From the organic butcher, roast, steak and chops.
• Organic lamb, sausages.
• Chicken schnitzel and topside.
• Chicken thighs.
• Chicken, pork, leg ham, salami and schnitzel.
• Organic chicken breasts.
• Half a hot chicken.

• Steak, rack of lamb, chuck, sausages and roast chicken.

Consumption of Kangaroo
Four of the people in the group had eaten kangaroo at some time in the past. Feedback included the following:

• One person was at a barbecue and had been served very thin slices of kangaroo with pepper.

• One person went to a restaurant that had kangaroo, crocodile, emu, buffalo and camel on the menu.

• Another person had also tried kangaroo at a restaurant.

Feedback on kangaroo included:

• ‘It’s okay.’

• ‘You cannot have too much of it.’

• Some had not thought about it but had tried it when it was offered.

• Some were worried about the fact that it was a wild animal. Feral animals are not healthy and perhaps there was a health risk.

• ‘Eating kangaroo is like eating the bald eagle.’

• Other people in the group simply had no opportunity to try kangaroo.

Views on Kangaroo
One person who had eaten kangaroo found it more tender than he had thought. The kangaroo meat was very tender at a restaurant but this person wondered whether they could cook kangaroo well at home.

Another person felt that kangaroo was good for a change but was not a regular weekly purchase – it is more of an occasional purchase.

Kangaroo has a strong flavour – much stronger than steak.

People in the group agreed that it had a strong, gamey and rich flavour.

Comparison with Other Meats
Some felt that kangaroo did not compare well with other meats – ‘I don’t love it like I like chicken’.

Kangaroo does not compare as highly with other meats because it is not eaten as often.

People were ‘brought up on beef and chicken’. People agreed that getting used to food early on had a big influence on what they ate today.

Australians eat Vegemite but adults who come to Australia from other countries do not necessarily like the Vegemite flavour.

One person felt that as kangaroo was a strong meat, people would use less of it because of the strong flavour.
Health and Nutrition
People made the following comments on the health, nutrition and other benefits of eating kangaroo:

- ‘There are a heap of them.’
- Australia is the only country that eats its national emblem.
- Some thought of kangaroos as pests.
- Kangaroos are ‘fed to dogs’.
- Kangaroo is high in iron.
- Eating kangaroos is better for the environment than eating beef. A cow has the greenhouse gas emissions equivalent to a Land Rover.
- Some did not know where to get kangaroo from.
- People discussed the fact that when animals are shot, the stress hormone can affect the condition and quality of the meat. People would want to know the conditions under which kangaroos are shot.
- People knew that kangaroo was lean meat.
- Some were not sure what part of the kangaroo was available – is it the rump?
- One person commented that ‘they use all of the kangaroo for dog meat’.

Knowledge of Kangaroo Killing and Processing
One person in the group had been out shooting kangaroos.

Shooting kangaroos is a pest control issue in some areas.

Some in the group were not sure what the relationship was between kangaroo numbers and the land.

Disadvantages of Eating Kangaroo Meat
The high iron content can be a problem for some people.

There can be a perception that kangaroo is ‘roadkill or pet food’.

One person in the group was an American and felt that eating kangaroos was like eating bald eagles.

Some felt sorry for the ‘poor joeys’ when mother kangaroos were shot.

Some had seen information about kangaroo and kangaroo recipes in magazines such as Gourmet Travellers – exotic magazines.

There was push on promoting kangaroo for human consumption about 10 years ago. It became more mainstream – Geoff Jansz was cooking kangaroo but then it ‘fizzled out’.

Knowledge of the Kangaroo Population
People were not sure how many kangaroos there were in Australia but felt that there were ‘many’.
Some knew that ‘farmers hate them’.

One person thought there were a million or more kangaroos.

**Reaction to Conservancy Supply**

People were given information on the conservancy concept.

People provided the following feedback on their initial reaction:

- Some were concerned about female kangaroos being shot.
- People felt they were more likely to buy kangaroo if they knew what was behind it e.g. the conservancy brand.
- It is important to tell people what to do with kangaroo – how to cook it. People needed recipes and advice on preparation.
- One person would not buy it from Woolworths and Coles – the meat looks ‘old or dirty’.
- The product would need to be in gourmet packaging and the low emissions message and environmental branding needs to be on the packaging.
- Butchers could provide tastings. Wine tastings are popular and butchers could recommend the environmentally branded kangaroo to people when they are serving customers.
- The kangaroo needs to be packaged – a gourmet pack.

If the meat was just on a slab, it would look ‘diseased’.

Some people will not buy caged eggs so there are already examples where consumers will make choices for more natural or environmental products.

The product needs to have an image as a delicacy. It could also be promoted to encourage young people to try the product.

**Benefits the Conservancy Would Need to Deliver**

The key benefits the conservancy product would need to deliver included:

- Integrity of the product.
- Good quality and consistent quality.
- Good quality – killing the animal as soon as it is caught.
- Food safety.

**Range of Information Consumers Need**

The range of information that consumers wanted about the conservancy brand and its role in sustainable properties, preserving the environment and sustainability of kangaroo populations included the following:

- Price – is it cheaper than (beef) meat.
• Why is the price 20% higher than other kangaroo?
• The quality and the integrity of the product.
• An Australian business – produced by Australians.
• Some were concerned about game meat – pigs and rabbits have parasites and some were concerned about the health of the animal and whether eating kangaroo could cause harm.
• Nutritional information including fat content.
• ‘Why it is good for you’. The omega-3 message has been a strong one – tell people why it is good for you.
• Good packaging and the story on the pack.
• People felt that the product should be sold through butchers and consumers could be given a booklet explaining the conservancy product.
• Safe.
• Good for you.
• ‘Not Skippy or Captain Kangaroo’.
• Fresh.
• Gourmet.
• Organic.

**Branding Compared to Other Kangaroo**

People felt that the conservancy product should have the following branding compared with other kangaroo:
• Better quality – building the reputation.
• People mentioned the ‘eat red meat’ TV ads. These have been very effective.
• Develop the cultural approach – kebabs with bush spices. The kangaroo product could come with sachets or pre prepared marinades or spices.
• Include an Aboriginal recipe and a recipe book.

**Best Types of Products**

Consumers felt the following products would be the best types of products for the new kangaroo product:
• Fillets – this is a delicacy.
• Kangaroo jerky.
• Kebabs.
• Rissoles.
• Chorizo sausage.
• One person suggested mince for tacos but others felt that mince was too down market.
• Kangaroo sausages. Stronger style sausages such as Italian or chorizo would be good as kangaroo has a strong flavour.

• Kangaroo prosciutto – this is good.

**Attractiveness of the Conservancy Brand**
The attractiveness of the kangaroo product compared with other premium meats such as organic beef, corn fed chicken and free range chicken would depend on the labelling and the promotion.

People would need to understand what the environmental brand actually meant.

People understood what the terms ‘organic’ and corn fed meant but they were not really sure what the environmental or conservancy message was.

This needs to be a clear message combined with information about safety and quality of the product.

**Availability**
People felt that it would be okay if the product was seasonally available, e.g. available in winter. If it is intermittent supply, some would not remain interested.

**Information on the Conservancy**
Some in the group pointed out that the conservancy farmers would still be producing cattle – cattle produce methane and farmers clear land. What is the difference or benefit with the conservancy kangaroo?

Farmers may be looking after the land but are they looking after the kangaroo or the cattle – these seem to be completely separate.

It will be important to have an environmental message on the cattle issue.

**Trying the Conservancy Product**
Eight of the people in the group would be prepared to try the new product.

People would be interested in a taste test.

People suggested television advertising, brochures and recipes in the pack to promote the product.

Perhaps the new product could have its own brand of sauce – not on the meat itself but in a pack that is separate.

The new kangaroo product could also have its own recipe book – this would be very useful.

**Important Messages**
Important messages included the following:

• Availability of the product is a big thing.

• What does it mean in terms of emissions? There was a lot of talk about emissions and people would want to know what impact it was having.

• Have the options for recipes and recommendations on wine.

• ‘Will the kids eat it?’

• Can it be used at a barbecue – will everyone in the family eat it? If the whole family would not eat it, some would not buy it.

• It would be something new.
• People need advice on preparation.

• Perhaps there could be a promotion – kangaroos for kids like the pasta shapes at McDonald’s.

People felt that the following messages were important:
• Where people can buy the kangaroo.

• More information on how to cook the kangaroo and more kangaroo recipes.

• Quality assurance including food safety.

• Assurance about the source and the ability to trace back – some felt that general information was okay but felt that GPS tracking was a bit too much.

• Sustainable management of kangaroos.

• Sustainable management of pastures and land with a high level of ground cover as a result of harvesting kangaroos from the conservancy area.

• Sustainable management of wildlife.

• Reducing greenhouse gases by eating kangaroo – people felt that they would do anything that will help.

**Environmental Balance**
People felt that it was important to have an improved balance between kangaroos and sheep but properties would still continue to carry sheep or cattle.

**Top Priorities**
‘If the product is a success, it will not make a dent in the 50 million kangaroos out there’.
Top priorities for the new product included the following:
• Some did not want mother kangaroos with joeys shot.

• Kangaroos are very territorial -If farmers took the fathers, kangaroos, would this affect family groupings?

• How can the suppliers guarantee the quality?

• Why is it better than beef?

**References**


Marketing Kangaroo Meat from the Sustainable Wildlife Enterprises

*The Conservation Dimension*

RIRDC Publication No. 08/039

This report focuses on the markets for products labelled as originating from sustainable enterprises where biodiversity has been enhanced. In particular, market research has been carried out within the study in order to assess and facilitate the development of a marketing strategy for kangaroo meat emanating from land and wildlife managed by the Maranoa Wildlife Conservancy.

This research report provides information on the kangaroo meat market in Australia with regard to strategies for market development of Conservancy produced kangaroo meat and in particular an assessment of the potential badging of products with some form of environmental accreditation.

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