Report into the feasibility of re-introducing skin-only shooting in NSW
This document provides information to address the intent of Project Number 21147 as agreed to by Department of Environment and Conservation.

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1. Executive Summary

Skin-only shooting was prohibited in NSW from the 13th of June 1996. A preference existed for full utilisation of any commercially harvested animal, consequently as quotas were likely to be met, the moratorium on skin-only harvesting was introduced to ensure that the limited supply was fully utilised.

This report has been compiled to consider the feasibility of re-introducing provision for a skin-only harvest into the New South Wales harvest through the next Kangaroo Management Program. Consequently this report includes the following:

- The identification and analysis of the advantages and disadvantages of skin-only shooting for each major stakeholder group.
- A review of the provisions of relevant NSW legislation and administrative arrangements with regard to skin-only harvesting including the impact on compliance activities and costs.
- A consideration of the political consequences of re-introducing skin-only shooting in NSW in the next KMP.

A review of the Queensland data has shown some very clear trends over the period from 1995 to 2004 including:

- Decreasing skin-only harvest (See figure 1);
- Increasing skin/carcass harvest;
- Little correlation between harvest and quota except when the harvest is limited by the quota;
- Steadily increasing overall harvest; and
- The influence of climate extremes, such as prolonged drought, on harvest and quotas.

![Total QLD Kangaroos Harvested with Skin-Only Harvest from 1995 to 2004](image-url)

**Figure 1.** Skin-Only Harvest in Queensland from 1995 - 2004.
The NSW harvest zones are different to that of Queensland in a number of respects, including size, bioregions and settlement patterns. However there are some similarities that point to a close relationship between the two harvests. Both NSW and Queensland harvest similar numbers of kangaroos despite the quota variations. This suggests that market forces are driving each harvest to similar levels despite differing quotas and climate patterns.

There are some clear arguments for and against the re-introduction of skin-only harvesting. Primary producers feel that skin-only shooting will help meet local zone quotas, reducing the impact of kangaroos on their properties. They also feel that it will provide them with an opportunity to make some extra money from kangaroos that would otherwise be left in the paddock if shot under non-commercial licences. The kangaroo industry feels that the re-introduction will destabilise the industry through opportunistic harvesting and supply. The industry also feels that given the high quota utilisation rate in NSW that maximum utilisation is the better way to go.

One thing is clear from the government’s perspective; if skin-only shooting is re-introduced it will result in a significantly increased compliance burden. From experience in the Queensland industry there are important compliance issues that will arise with the re-introduction of skin-only, in particular the monitoring of the harvest and storage of a product that is easily hidden and transported.

If skin-only shooting is re-introduced, there are a number of issues that will need to be addressed before hand; these include who gets to shoot for skins-only, when and under what circumstances, and where. This report recommends that if skin-only shooting is to be re-introduced, it should be open to all trappers in the harvesting zones at all times with clear size limits, otherwise the compliance and administrative burdens will become unenforceable and unmanageable respectively.

This report concludes, however, that a skin-only harvest should not be re-introduced for the following reasons:

- The policy would complicate the defence of the program at the commonwealth level, especially during an Administrative Appeals Tribunal (AAT) appeal;
- Reintroducing skin-only harvest would benefit relatively few, while potentially destabilising the industry in NSW;
- NSW has a relatively high quota utilisation rate and is comparatively well serviced, this was one of the key arguments for introducing a moratorium on skin-only shooting originally;
- The compliance burden increase is potentially very large;
- Re-introduction will not help fill local zone quotas; as seen in Queensland where skin-only shooting is allowed, the skin-only harvest has been largely replaced by carcass shooting even in the Western Region where it has fallen from 94% in 1995 to 14% of regional harvest in 2004, accounting for 0.25% of total Queensland harvest in 2004

However, whatever recommendation the Kangaroo Management Advisory Panel makes and Government decides to pursue, we recommend that it be made clear to all parties that the decision will not be reversed and that the issue is not considered again in relation to future kangaroo management programs.
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2. Introduction

Kangaroos (referring in this report only to those species currently commercially harvested) in NSW are managed in accordance with a Commonwealth approved Kangaroo Management Program (KMP). The current program, in force from 1 January 2002 to 31 December 2006, prohibits the taking of kangaroos for skin-only.

Skin-only shooting was allowed in NSW until the 13th of June 1996. Following a review of this policy, skin-only shooting was prohibited because of falling supply in the mid 1990’s. A preference existed for full utilisation of any commercially harvested animal, consequently as quotas were likely to be met, the moratorium on skin-only harvesting was introduced to ensure that the limited supply was fully utilised. The moratorium has been revisited on a regular basis since that time, and appealed by industry members; however the same reasons for prohibiting skin-only harvest have prevailed, with added weight brought to the argument regarding the welfare monitoring aspects of a skin-only harvest.

In accordance with the KMP, a Kangaroo Management Advisory Panel provides advice to the Director-General of the NSW Department of Environment and Conservation (DEC) on matters pertaining to the implementation of the KMP and kangaroo management more generally.

Landholder based organisations represented on the panel include in their policies campaigning for the re-introduction of skin-only shooting. However, kangaroo industry representatives on the panel generally oppose skin-only shooting. Most other stakeholder groups have had their standpoints articulated through past correspondence, however only two other stakeholders have officially commented on the proposal for the purposes of this report:

1. The RSPCA states that as long as the harvest is carried out humanely then, for them at least, what is done with the carcass and/or skin is immaterial; and
2. NSW DPI does not support the permanent banning of the skin-only harvest.

As part of the review of the KMP, the Kangaroo Management Advisory Panel members have requested information on the feasibility of reintroducing skin-only shooting in NSW via the next KMP. Consequently this report includes the following:

- An analysis of current and historical commercial harvest data from Queensland, where skin-only shooting is still conducted.
- The identification and analysis of the advantages and disadvantages of skin-only shooting for each major stakeholder group.
- A review of the provisions of relevant NSW legislation and administrative arrangements with regard to skin-only harvesting including the impact on compliance activities and costs.
- A consideration of the political consequences of re-introducing skin-only shooting in NSW in the next KMP.
3. Background

3.1 Management history and the guiding principles of the NSW Harvest

The goal of the current NSW Kangaroo Management Program is to maintain viable populations of the commercially harvested species of kangaroo throughout their ranges in accordance with the principles of *ecologically sustainable development*. This sentiment is the basis for kangaroo management in all mainland states where commercial harvesting occurs.

Historically, goals concerning kangaroo management seem to be confused in many reports, a result of the long and complicated history of kangaroo management in Australia. There have been varying levels of emphasis on population control, damage mitigation in grazing lands, industry sustainability and conservation reflected in the management of kangaroos. In fact in the many years that the harvest has been running in NSW, it is only in the most recent Kangaroo Management Program 2002 – 2006, that the long-standing objective of damage mitigation and pest control has been removed.

This point is made to highlight the ongoing controversy surrounding the kangaroo harvest program and the historical context in which these controversies are based. Initially kangaroos were harvested for food and skins by the Aborigines. Following colonisation by the Europeans, kangaroos were seen as food, pest, sport, sustainable resource and intrinsically valuable national icon, depending on circumstances. These perceptions are all still alive and well in varying sectors of our community.

This difference in perceptions directly impacts upon the issue of skin-only harvesting as these perceptions bias the particular attributes of kangaroos in the eyes of the key stakeholders. For example graziers often view the kangaroo as a pest, competing with domestic livestock for valuable and scarce resources; animal rights groups emphasise the kangaroo as an intrinsically valuable animal, an Australian icon which shouldn’t be hunted; the kangaroo industry (trappers, dealers and processors) view it as a resource to be used in a sustainable way. Of course these views are generalisations and would not accurately reflect the views of everyone in these groups. These perceptions have influenced management in the past, and will continue to do so as long as government is committed to a consultative management framework.

The management and harvest of kangaroos in Australia is also influenced by many biophysical factors that interact in complex ways and are often hard to predict. As most people are aware, the total population and population density of kangaroos are determined to a large extent by the climate and its effect on the availability and quality of food (pasture). The kangaroo populations and densities observed during surveys determine the yearly quota.

The quota and climate defines the availability of kangaroos as a resource for industry; for example:

- during good seasons there are plenty of kangaroos - but often they are spread out so trappers have to work harder to get them; and
- during dry times, kangaroo numbers are down - but they are often concentrated in smaller areas making harvesting easier.

Consumption/demand is driven by a combination of consumer need/desire and price. Consumption drives the demand, demand drives the market and the market drives the trappers and fauna dealers to try to meet the demand. What they harvest is the “supply”. The kangaroo population and climate drive availability, so the supply is defined by the amount of population that can be harvested for a profit. Therefore the $/unit (skin and/or carcass) defines the rate at which the harvest will be pursued.

Consequently supply and demand are driven by very different and unpredictable elements. Industry is constantly fighting for stability as a result.
3.2 Skin-only Moratorium History

Long before the moratorium on skin-only shooting in NSW in 1996, the practice had been discouraged. In a report by the CSIRO (Young and Morris 1985), to the NSW National Parks and Wildlife Service (NPWS), it was stated that the practice of skin-only shooting, while permitted in Queensland, is virtually banned in NSW. Peter Morris (pers. comm.) stated that before the moratorium, trappers were only allowed to shoot kangaroos for skin-only if the property was over a certain distance away from a chiller.

In 1996 the commercial skin-only harvest was prohibited due to falling populations in the mid 1990’s. The NPWS felt that the industry would be better served if a maximum utilisation policy was introduced for the shrinking quotas. It was also argued that leaving carcasses in the field would provide food for feral animals including foxes, thereby contravening the fox threat abatement plan.

As a result of this decision there have been continuing appeals against the skin-only harvest ban, driven primarily by various primary producer lobby groups.
4. Current and historical trends of the QLD harvest

In this study we will be using the Queensland harvest to look at potential trends that could be applied to the NSW kangaroo harvest. This is done for two main reasons:

1. Of the States where kangaroos are harvested commercially, the Queensland harvest is the closest to NSW in terms of quota and harvest; and
2. Queensland’s Macropod Management Program has also permitted the skin-only harvest to run concurrently with the skin/carcass harvest.

While it is acknowledged that the Queensland management system is different to that of the NSW system, it is felt that the trends in market forces that drive the Queensland system and industry will also impact in a similar way on the NSW system and industry.

Regionalisation was introduced into Queensland by way of the Queensland Wildlife Trade Management Plan in 2005 to meet commonwealth requirements and reduce potential for regional over-harvesting. The data recording techniques of the Queensland Macropod Management Program is such that it has been possible to retrospectively apply these new regional boundaries to the historical data. This allows a closer examination of any regional trends to help us understand issues affecting the harvest of kangaroos in Queensland.

4.1 Historical Trends (1995 to 2000)

4.1.1 State Overview

In 1992 the Nature Conservation Act was introduced in Queensland, repealing the Fauna Conservation Act 1974, among others. In 1994 the Nature Conservation Regulations were also introduced. The indirect result of these new pieces of legislation was to deregulate the licensing restrictions of the Queensland equivalent of the NSW Fauna Dealer (Wholesalers). The result is that any person can apply for a commercial wildlife licence and set up any number of dealer sites, at a certain fee per site, to operate anywhere in the Queensland harvest area as long as they have a Queensland address.

A report by Macarthur Agribusiness and EconSearch in 2003 found that this deregulation caused an increase in the number of licence holders and an increase in the number of business failures. It was also found that this led to a period of industry destabilisation, followed by industry rationalisation and concentration, during which time new market sectors were opened and developed.

While the approach of deregulation to allow market forces to play a more deterministic role was employed in the QLD Macropod industry, the NSW approach is different. However, a comparison is still useful as the market effect will still heavily influence trapper behaviour in NSW.

To look at potential historical trends in the QLD harvest, data from 1995 to 2000 was analysed for two key reasons:

1. to show the harvest situation after the deregulation of the Queensland industry; and
2. apart from small demand variations, the market up until 1995 had been driven primarily by the skin markets, rather than the meat trade. We felt that to use data from before this point was not relevant to the current situation in NSW or QLD.

Data from 2001 onwards will be examined in Section 3.2: Current Trends.

Figure 2 shows a comparison between the skin-only and the skin/carcass harvest for the years between 1995 and 2000. It is important to note in the graphs, that when carcasses are shown, it actually means both skin and carcass, while skin means the skin-only harvest.
Figure 2. Skin versus Carcass Harvest in QLD (1995 – 2000).

Figure 2 shows the transition period between the skin-only dominated harvests of the mid-90’s as it moved towards a more evenly distributed harvest of carcass/skin and skin-only harvest in the late 90’s with a growing dominance of the carcass/skin harvest in 2000.

This trend is also reflected in Figure 3 which represents the percentage utilisation of the total harvest between the two harvest types. The skin-only harvest almost halved its market share in five years, from 75% of the harvest to just over 40%. Conversely, the skin/carcass harvest rose from a 25% share in 1995 to just less than 60% in 2000, an average rise of over 9% annually.

Figure 3. Skin versus Carcass Percentages of Total Take in QLD (1995 – 2000).
While this is impressive growth when represented in this configuration, Figure 4 tells a different story. Figure 4 shows the percentage of the quota that was actually harvested. It is clear that the actual harvest as a proportion of the approved quota declined significantly from 98% in 1995, to 45% in 1997. The numbers then fluctuated mildly around the 50 percent range from 1997 to 2000.

![QLD percentage of total quota used 1995 - 2000](image)

**Figure 4.** Percentage of Total Quota Taken in QLD (1995 to 2000).

Figure 5 illustrates the total harvest activity and quota over the same period. It is evident that there was a significant drop in terms of the percentage of the quota taken and that the number of kangaroos harvested in 1997 was only approximately half that taken in 1995. However, the following fluctuations in the percentage utilisation do not reflect the steady increase in harvest in the years following 1997 up to 2000. This suggests that in the later years of this period the harvest was not limited by the quota.

![Total QLD Kangaroos Harvested and Quota from 1995 to 2000](image)

**Figure 5.** Total Macropods Harvested with Quota in QLD (1995 – 2000).
4.1.2 Regional Breakdown

While Queensland has only recently been broken up into a regional quota/harvest system, it has been possible to retrospectively break up the harvest data provided into these regions. Map 1 shows the Queensland regional breakdown as of 2005. Queensland has been broken into three harvesting regions - Eastern, Central and Western - to reflect a combination of geography, harvest utilisation rates, ecology and kangaroo distribution. It was broken into regions for two key reasons:

1. it was a commonwealth requirement of the most recent Wildlife Trade Management Plan – the commonwealth is trying to standardise the way kangaroos are managed; and
2. it was considered desirable by the Queensland EPA to reduce the possibility of localised over-harvest.

The Western Region encompasses the western and most isolated regions of Queensland. The Central Region is where most kangaroos are found due to a combination of a large area and higher densities compared to the other regions. The largest harvest occurs in this region. The Eastern Region is located over some of the most productive extensive grazing and cropping lands in the state.

Map 1: Queensland Macropod Harvest Zones.
Source: The EPA website (www.epa.qld.gov.au)
Figure 6 (see below) is a regional breakdown of skin-only harvest as a percentage of the total harvest for Queensland. The majority of skins in Queensland came from the Central Region, falling in 1995 to 1998 from 67% to 37% and then staying around the 40% mark in 1999 and 2000.

According to this data, the Eastern and Western regions played a very minor role in skin-only harvest in QLD. The Eastern Region consistently averaged around 2% in this period; while the western skin-only harvest averaged around 4.5% from 95-98 then fell to just above 1% in 2000.

Figure 6. Regional Skin-Only Take as a Percentage of Total QLD Take (1995 – 2000).

This trend is supported by the regional harvest totals for this period (Figure 7). It shows that the Eastern and Western Region harvests fell vastly short of the Central Region harvest totals.

Figure 7. Queensland Regional Harvest Totals (1995 – 2000).
Figure 8 shows the relative level of skin-only harvest as a percentage of the regional harvest. This gives a clear picture of the skin-only harvest in terms of regional importance.

One of the most obvious trends was the relative importance of the skin-only harvest in the Western Region. It was consistently of a higher percentage in terms of regional harvest and didn’t decline until 1998/99. The skin-only harvest in the Western Region was producing over 90% of the region’s harvest from 1995 – 1997, and was still providing greater than 55% of harvest in 2000, when the other regions had both dropped to or below 40%.

![QLD Regional Skin-Only Harvest as a % of Total Regional Harvest](image)

**Figure 8.** Regional Skin-Only Harvest as Percentage of Total Harvest for each Region (1995 – 2000).

The Central Region which, in this period, provided the greatest number of skins as a region fell from 75% skin-only harvest to around 40%. This 35% fall equalled the decline in the proportional contribution of skin-only harvest to the **overall** harvest during this period, highlighting the influence the Central Region had on state trends.

Figures 9 to 11 offer a breakdown of each regions skin-only harvest compared to the skin/carcass harvest. Figure 9, on the following page, illustrates the Central Region’s dominance in terms of numbers of kangaroos harvested and therefore the major influence of that region on overall state trends.
Figures 10 and 11 show the regional variation that is reflected in Figure 8. Both regions have a similar level of overall harvest, but the Western Region’s reliance on skin-only harvest was very obvious as represented in Figure 10 and continued until the year 2000.

Also obvious in Figure 10 was the overall decline in activity in the Western Region during this period. From a total number of 84,741 shot during 1995 to less than half of that, 31,559, in 2000. The skin/carcass harvest in the Western Region was steady from 1995 to 97 with a sharp increase (roughly four-fold) in 1998. This number was halved in 1999, but increased marginally in 2000.
Figure 11. QLD Eastern Region Skin-Only Harvest Compared to Skin/carcass Harvest (1995 – 2000)

It is interesting to note that for all regions during this period, 1995 was the year with the highest level of harvest in terms of numbers of kangaroos harvested and the percentage of the quota used. 1997 was the period of lowest harvest and proportion of quota utilised.

Figure 12 shows the skin-only harvest as a percentage of the available quota on both a regional and state scale, with the total representing the total skin-only harvest for that year. It is evident from this figure that the Central Region was the primary driver of the skin-only harvest in Queensland. This figure also shows a massive decline in the percentage of the skin-only utilisation (total) of the quota from 1996 to 1997 (from 63% to 26%). From 1997 to 2000 there was a slight but steady decrease in the overall Queensland utilisation of the quota by the skin-only harvest from 26% in 1997 to just under 20% by 2000.

In the Eastern Region, the skin-only harvest formed a small but consistent percentage of the available quota. In contrast the Western Region fell from just under 5% to just over 0.5% during the period. The biggest annual decline occurred from 1996 to 1997 where skin-only harvest fell from 4.7% to 2.1%.

Figure 12. QLD Skin-Only Harvest as a Percentage of the Available Quota (1995 – 2000).
4.1.3 Discussion

From this data we begin to see some interesting trends develop. 1995 marked the period just after the deregulation of the industry as new legislation was brought into force. 1995 also marked the start of a decline in the numbers of kangaroos shot as well as the percentages of the total harvest shot for skin-only at a State level. This trend continued until 1997, where it bottomed out at just under half of what it was in 1995. The question that must be asked is whether there was anything else influencing the industry at this stage? From communication with people in the industry (see transcripts of interviews in Appendix 1) there were certainly other factors at play. These include:

- A very ‘hot’ market drove demand for a lot of skins and meat. This resulted in large numbers of smaller kangaroos being harvested, bought and processed. This is reported to have reduced the overall quality of the product being sold;
- To combat this, a larger minimum skin size was introduced in 1996, from 4sq.feet to 5sq. feet;
- This was combined with a tight quota that the industry and government tried to manage to ensure supply across the year;
- The period from 1995 to the end of 1996 was very dry over much of the harvest area impacting on numbers and quality of kangaroos;
- The price increases for skins made it increasingly economical for manufacturers to use alternative materials; and
- The code of conduct requiring head-shot only was introduced as mandatory to the industry in 1996.

As this trend was reflected in all regions, it suggests that the drop in harvest from 1995 to 1997 was the result of a combination of these factors all impacting at the same time.

From 1998 onwards it appears that the industry made a steady recovery. While the quotas fluctuated (see figure 5), the actual number of animals harvested rose steadily from the 1997 low to regain a lot of the ground it had lost from 1995. This suggests that the variation in quota utilisation rate owed more to the impact of seasonal conditions on kangaroo populations (and hence quotas) than industry instability.

The steady harvest increases occurred at a time when processors who bought carcasses began to flourish due to the economic climate, whereas those buying and processing only skins found it increasingly difficult to survive. 1998 was the first year in which skin/carcass harvest outweighed the skin-only harvest (roughly 55/45 ratio). This gap was closed again in 1999 with close to a 50/50 harvest rate split, but was clearly opened in 2000 with a 60/40 ratio.

Talking to industry members it seems that this was a result of a number of factors:

1. the opportunities for overseas export increased;
2. approval to sell cryovac, unstained kangaroo meat in supermarkets was forthcoming;
3. acceptance of kangaroo meat as a source of food for both people and pets increased,;
4. the numbers of trappers and dealers increased; and
5. the affordability of technology, such as chillers, etc also increased.

These factors combined to make it economically viable for trappers to invest in the equipment, trucks with proper racks, etc., to enable skin/carcass shooting to occur on a greater scale.

These state trends were reflected on the regional level, but with some interesting variations. The most interesting of these is in the Western Region where the level of skin-only shooting was consistently higher than any other region, providing a minimum of 55% of the total regional harvest over the entire period. In a report of the extent of compliance with the code of conduct, the RSPCA noted that ‘skin-only shooting occurs mainly in the more remote parts of the state…as the transport of carcasses to a
The overall level of harvest varied the least in the Eastern Region, with the transition from a skin-only dominated harvest to a skin/carcass dominated harvest happening relatively gradually. There is no clear explanation for this; however a less extreme climate variability may have been an influence.

The Queensland government’s climate based website ‘Long Paddock’ (2005) described the climate during 1995 and 1996 as drier than the average, which may explain why the quotas fell during these years. However 1997 was a very wet year with flooding across much of western Queensland (this equates to much of the Central and Western harvest Regions). This was followed by good seasons from 1998 to 2000. While the flooding might have slowed the kangaroo harvest in 1997, its effect alone would not account for the dramatic decline in harvest. This may have been attributable to the continuing good growth season later in the year, and the subsequent dispersal of a reduced population recovering from the extended dry period in 1995 and 96.

As the seasons continued to improve from 1998 to 2000, the population and their densities began to increase. This is reflected in the rapidly increasing quotas, especially from 1998 to 1999 where the quota rose from 1,875,000 to 2,805,000 animals. This may have allowed an increasing market demand to be met, in turn driving the gradual and steady increase in harvest as population densities began to increase. The increase in harvest appears to have been unconstrained by the quotas, and may have been driven more by market demand and a stabilizing and maturing industry.

There is no single feature of the kangaroo harvest that stands out in this data as a determining factor for the recorded harvest rates and market demand. Rather it was a complex interweaving of many factors such as legislative change, climate, market demand, population density, technology and the economics of the industry that drove harvest rates and harvest type.

4.1.4 Summary of key points.

- 1995 and 1996 were very dry years with relatively low quotas and high harvests.
- The industry was deregulated in 1996 while the skin-only harvest was still dominating the industry.
- The market for meat was slowly developing during this period.
- The market for skins in 1996 was very hot; this led to smaller animals being shot to meet the market demand, allegedly leading to inferior product.
- The increased skin prices made it more economically feasible for manufactures to use other products, decreasing demand for skins.
- The industry pushed for and got a larger minimum size limit introduced to ensure quality and cost-effectiveness of skin processing.
- The code of conduct requiring mandatory head shooting was introduced in 1996.
- 1997 was a wet year with the lowest harvest of both skins and skin/carcass in the period.
- In 1997 the minimum skin size dropped back to 4 sq ft.
- There was a big percentage increase in the skin/carcass harvest across the board with a corresponding drop in the proportion of skin-only harvest during 1998.
- The period from 1998 to 2000 saw a steady growth in the number of animals taken by the industry.
- The steady growth did not correspond to the size of the quota; that is the quota jumped from 1.8 million in 1998 to 2.8 million in 1999, but only an extra 126,000 animals were shot. The following year the quota remained the same but again an extra 140,000 animals on top of 1998’s total were
taken, bringing the total kangaroos harvested to 1,190,685. This trend continued into 2000 with the quota remaining at 2.8 million, the harvest increasing again by 188,000 animals.

- Skin-only shooting consistently made up the biggest percentage of regional harvest in the Western Region, although this was a relatively small proportion of the total harvest.
- Overall harvesting activity in the Western Region declined steadily over this period, despite the increase in the total harvest from 1998 – 2000.
- The Eastern Region was the most consistent in terms of total harvest with little variation regardless of quota or skin-only vs. skin/carcass harvest ratio, although it was small relative to the total Queensland harvest.
- The Central Region accounted for the majority of the harvest and dictated state trends.

4.2 Current Trends

4.2.1 State Overview

This section examines the years of 2001 – 2004 to investigate any trends in the kangaroo harvest in Queensland that may be relevant to the current discussion. As in the previous section, the data for these years has been summarised by region to match the current harvest data breakdown.

These years reflect a number of issues that are still current, namely:

- management practices; and
- market trends.

Climate over this period was dominated by extended dry periods over much of the harvesting area in Queensland. While these conditions are currently not the dominating force of climate in the harvesting areas, we believe that the data will still provide an excellent base to highlight any current trends in harvester activity and/or market trends.

It is important to note two things:

1. as before, when talking about the carcass harvest, it is implied that it is referring to the carcass and skin harvest; and
2. the graphs will include data from the 2000 harvest to provide a visual link between historical data and trends and the current data.

Figure 13 (see following page) shows the skin vs. carcass harvest in Queensland from 2000 to 2004. The most obvious trend shown by this graph is the continuing downward trend of the skin-only harvest during this period. The carcass harvest continued to increase until 2003 when it peaked and then declined during 2004 to around the 2002 level.

Figure 14 (see following page) shows the percentage of the total harvest for each type of harvest. The trend continued from 2000 averaging a 10% per annum fall in skin-only harvest until 2003, where it reached 10% of the total harvest. This decline slowed in 2004 when the skin-only harvest equated to just over 8% of the total harvest. These two figures (13 & 14) highlight the dominance of the skin/carcass harvest and the dramatic decline in the skin-only harvest over the period.
Figure 13. Total Skin-Only Harvest versus Skin/carcass Harvest in QLD (2000 – 2004).

Figure 14. Skin versus Carcass Percentages of Total Take in QLD (2000 – 2004).
Figure 15 (below) shows the percentage of the quota used by the harvest, for both skin-only and skin/carass harvest. From 2000 till 2003 the harvest averaged around the 55% utilisation rate, however, in 2004 the rate jumped from 55% (2003) to 70%.

![QLD percentage of total quota used 2000 - 2004](chart)

**Figure 15.** Percentage of Total Quota Taken in QLD (2000 – 2004).

While figure 15 shows a jump in the quota utilisation rate in 2004, Figure 16 (below) shows that the quota and numbers of kangaroos harvested fell in 2004. This leads us to the conclusion that in this case, the rise in utilisation was more about a large decrease in quota matched with a smaller decrease in harvest rather than a market or industry activity spike. The 2004 harvest fell by 335,000 from 2003 to pre 2001 levels.

![Total QLD Kangaroos Harvested and Quota from 2000 to 2004](chart)

**Figure 16.** Total Macropods Harvested with Quota in QLD (2000 – 2004).
4.2.2 Regional Breakdown

The data for the period between 2001 and 2004 has been summarised according to the current regional boundaries. Figure 17 (below) shows the regional breakdown of the skin-only harvest as a percentage of the total harvest for Queensland during this period. It is clear that the impact of the skin-only harvest in the Eastern and Western regions from 2001 was negligible; the period from 2001 to 2004 saw a significant fall in the importance of the skin-only harvest as part of the overall harvest, from around 30% to less than 8%.

![Figure 17. Regional Skin-Only Harvest as a Percentage of the Total QLD Harvest (2000 – 2004).](image)

![Figure 18. Queensland Regional Harvest Totals (2000 – 2004).](image)
A comparison between figures 17 and 18 shows that while the skin-only harvest was declining in all the regions (figure 17), the overall harvest in the same period was increasing in both the Eastern and Central Regions. However there was a decline in the total harvest in 2004. The Western Region in Figure 18 (previous page) showed little change in harvest totals over this period, but this was due mainly to the relative small harvest, especially compared to the Central Region.

Figure 19 (see below) illustrates the importance of the skin-only harvest in terms of regional harvest. It is clear that the trend from 1995 to 2000 continued, with overall skin-only harvest decreasing, but with differing degrees of regional bias.

The period between 2001 and 2002 seemed to experience the most dramatic decrease for the Western Region skin-only harvest which fell from just under 45% of the regional harvest to just over 20%. This decrease continued in the Western Region until 2004 when it increased in relative harvest, whilst the remaining regions continued to decline.

In the Eastern Region, the skin-only harvest suffered a large decline in relative terms between 2000 and 2001, from 37% to 15%. After 2001 the decline slowed, stalling in 2004 with a harvest share very similar to that of 2003.

The Central Region’s skin-only harvest decline, while significant, occurred in 10% increments from 2000 to 2003. This decline slowed dramatically to 2% from 2003 to 2004.

**Figure 19.** QLD Regional Skin-Only Harvest as a Percentage of Total Regional Harvest (2000 – 2004)

The regional skin and skin/carcass comparison (Figures 20 – 22) offer a regional overview of the Skin and skin/carcass harvest for the period 2000-2004. Figure 20 (see following page) shows the diminished harvest of skin-only compared to the growth of the skin/carcass harvest in the Central Region. Once again the Central Region dominated the Queensland harvest, averaging over 1.5 million animals harvested annually during this period. The harvest of both skin-only and skin/carcass was reduced in 2004 to below the levels reached in 2002.
Figure 20. Central Region Skin-Only Harvest Compared to Skin/carcass Harvest (2000 – 2004).

Figure 21 (below) shows the skin-only harvest in the Western Region which declined until 2002 and then increased (albeit very slightly) in both 2003 and 2004, though still below 5000 animals. This seemed to counter the overall trend in the Queensland industry of decreases in skin-only harvest. Another trend apparent in the Western Region that countered the trends evident in the other regions is the decline in overall harvest from 2000 to 2002. When combined with the historical data, the decrease in the harvest had been evident from 1995. This is in direct contrast to the overall trend of a steady increase in the overall harvest in both the Eastern and Central Regions from 1997.

Figure 21. Western Region Skin-Only Harvest Compared to Carcass/ Skin Harvest (2000 – 2004).

Another interesting feature of the Western Region was the variability of the harvest rates during this period; for example:

- the skin-only harvest declined by more than half between 2001 and 2002; and
- 2003 saw a massive increase in the skin/carcass harvest to more than double that of any of the previous years in the period. This number was slightly down in 2004 but still well above the average for this period.

However, these trends must be put into perspective; and in terms of numbers of animals taken, the Western Region was not a significant player in the Queensland macropod industry. For example, 2002 was the year in which the smallest total of animals were harvested in the Western Region. The harvest was just over 16,000 animals, thus representing about 0.9% of the total Queensland harvest in that year. The following year (2003) represented the year that had the largest harvest during this period of just over 33,000 animals, representing 1.7% of the total Queensland harvest for that year.
Figure 22 (see below) shows that the Eastern Region’s skin-only harvest dropped from 2000 to 2001, when it seemed to settle for the rest of the period, fluctuating around the 12,000 animal mark. Overall there was a large increase in harvesting effort in the Region, varying from a total of 66,000 in 2000 to 151,000 in 2003. The data for the Eastern Region seemed to follow the Central Region trends during this period, that is, an increased skin/carcass harvest with a decline in the skin-only harvest.

Figure 22. Eastern Region Skin-Only Harvest Compared to Skin/carcass Harvest (2000 – 2004)

Figure 23 confirms and continues the trends observed in the period from 1995 to 2000. That is, skin-only harvest declined as a percentage of the available quota. This decline seemed to accelerate between the years of 2001 to 2002, and essentially halved the skin-only harvest as a proportion of the quota. The total skin-only harvest fell to just 6% of the available quota by 2004, indicating the dominance of the skin/carcass harvest.

Figure 23. Queensland’s Skin-Only Harvest as a Percentage of the Available Quota (2000 - 2004).
The Eastern and Western Regions have little impact on the skin-only trends in this graph, due to the dominance of the Central Region. It is interesting to note however, that in 2004 the Eastern Regions skin-only percentage quota utilisation climbed to almost the level of 2001.

4.2.3 Discussion

The trends that were observed in the data for the period of 1995 – 2000 were largely continued through the current 2000 - 2004 period as well. The overall harvest continued to steadily increase, again regardless of quota. This seems to point to a market driven increase rather than opportunistic harvesting. The steadiness of the rise has been interpreted by this report as indicating a stabilising industry.

However, in 2004 the harvest fell from a high of close to 2 million animals to around 1.6 million. This was matched by a drop in quota over this same period of over 1 million animals. The disproportionate drop between the quota and the actual harvest explains the sharp rise in quota utilisation rates in figure 15. The fall in harvest may have been driven by climate rather than the market. The climate of 2004 in Queensland was dominated by drought. Most of the available harvesting areas were drought declared, and this followed on from a dry latter half of 2002 and an extremely dry 2003, suggesting that kangaroo populations and densities were declining. The dry conditions would also have impacted upon the quality of the kangaroos that were still available for harvesting; that is declining carcass and skin quality.

The skin-only harvest continued to diminish over this period until it reached 8.2% of the total harvest in Queensland in 2004, compared to 75% in 1995 (see Figure 24 for the skin-only harvest from 1995 to 2004). This drop can be linked to a number of factors including:

- skin buyers preferring to acquire their skins from meat works because of quality (fresh);
- the increase in the dollar value of carcasses;
- an increase in technology and industry presence (more dealers and chillers in more locations); and
- an increase in profit/cost ratios making it economically viable to shoot for carcasses where it wasn’t before.

![Figure 24. Skin-Only Harvest in Queensland from 1995 - 2004.](image)
Andrew Lewis (pers. comm. 2005) states that in Queensland, skin-only harvesting is now mainly coming from carcass shooters who accidentally body shoot or kill underweight kangaroos. This may explain the slowing of the decline in skin-only harvest numbers in 2004; that is the 2004 skin-only harvest level may represent a baseline figure that is not driven by economic considerations or anything other than accuracy of shot and or weight judgement by the trapper. Climate may also have impacted on the slowing of the decline in skin-only harvest in 2004. That is, the quality of the carcasses was such that it may not have been economically viable for trappers to shoot for skin/carcass in the more remote regions, and therefore they refocused their harvesting effort on the skins.

The figures from the Western Region show a gradual increase in the number of skin-only animals harvested. Whether this is an ongoing trend or suggesting opportunistic harvesting in response to climate variability remains to be seen.

The Western Region, while insignificant in terms of impact on trends for the State, is an interesting region as it does not reflect many of the trends of the other two regions; For example:

- Skin-only harvesting still exceeded the skin/carcass harvest in 2000;
- The skin/carcass harvest declined from 2000 to 2002;
- Overall harvest decreased from 2000 to 2002, (historically it was decreasing from 1995 in other regions);
- Skin-only harvest increased slightly in 2003 and 2004; and
- There was a significant increase in activity in 2003, more than doubling the skin/carcass harvesting activity from the previous years; this was slightly abated into 2004 possibly due to the drought.

There doesn’t seem to be any clear reason for many of these peculiarities apart from the obvious factor of distance. The economics of travelling the vast distances in the Western Region help to explain the preference for skin-only harvest right up until 2000 and the overall decline in harvest activity up until 2003 as the skin-only market continued to shrink.

Given the massive jump in skin/carcass harvest in 2003 in the Western Region, one element must have changed significantly – economics. Skin/carcass harvesting required chiller boxes and as these boxes cost money to operate and put in place, the market must have reached a point where it was economically worthwhile expanding into the more remote areas. This would have allowed trappers to shoot for more than just skins, although during this increase in the carcass harvest there was also an increase in the skin-only harvest. As suggested previously, this may be explained by carcass trappers skinning those animals that did not meet the requirements of the carcass harvest. Another reason for the general increase in activity in the Western region during this period, might have been a decline in supply due to environmental conditions in the Eastern and Central Regions that pushed harvesting activities further west.

The Central and Eastern regions followed similar trends to those seen from 1995-2000, although with different scales. The Central Region was still by far the dominant region, with the Eastern Region coming in second. The Eastern Region harvest was on average four times as large as the Western Region harvest. However the Central Region harvest was on average 15 times that of the Eastern Region during this period. One interesting trend that the Eastern and Western Regions shared was a large jump in the harvest rates from 2002 to 2003 as a percentage of the quota utilised, primarily in the skin/carcass harvest. This increase was probably driven by the combination of market, lack of easily sourced kangaroos from the Central region and economically available kangaroos. ‘Economically available kangaroos’ refers to the number of kangaroos that could be shot, while still maintaining an acceptable profit margin for the trapper. Given that the drought started to impact significantly in the early 2003, this meant that relatively healthy kangaroos with good body condition would probably have started to congregate around diminishing resources, i.e. good pasture and waterholes. This meant that trappers could access the same number of kangaroos with less expense.
4.2.4 Summary of key points.

- The trends observed from the period of 1995 to 2000 were continued; that is skin-only harvest declined, while skin/carcass harvest increased. Some of the reasons why the skin harvest continued to decline include:
  - Skin-only harvest may now have been predominantly derived from skin/carcass trappers shooting animals that didn’t meet the carcass standards;
  - Skin processors preferred to get their skins from meat processors for quality reasons;
  - Availability of chiller boxes, etc increased making it more economically feasible to shoot for carcass in more areas; and
  - Better money was available for skin and carcass than for just the skin.
- The rate of decline in skin-only harvest slowed from averaging a 10% drop from 2000 to 2003, to a 2% drop in 2004.
- The total harvest continued to grow at a steady rate, regardless of the quota.
- 2004 saw a decline in the annual total harvest for the first time since 1997.
- This decline was probably due to the severe drought affecting all the regions.
- The Central Region still dominated the harvest.
- The Eastern Region continued to increase its share of the Queensland harvest.
- The Western Region harvest continued to decline until 2003 where it increased for the first time since 1995.
- The skin-only harvest was proportionally higher in the Western Region, than the other two regions, probably due to its remoteness, i.e. less chiller box service.

4.3 Implications for NSW

4.3.1 Overview

Can these trends in Queensland be used to make comparisons to the NSW data and provide for some useful predictions? Figure 25 (see following page), shows a comparison of harvest totals and quotas for both NSW and Queensland for the period between 1995 and 2004.

As shown by figure 25 the NSW and Queensland quotas tracked relatively closely in terms of trend, if not in scale. Even in terms of scale, the Queensland and NSW quotas matched fairly evenly up until about 1998, when Queensland quota growth outstripped that of NSW. This reached the point where in 2001 and 2002 the Queensland quota was close to double that of NSW.
Figure 25. Queensland and NSW harvest totals and Quotas.

Apart from a small fall in 2000, the NSW harvest seemed to parallel that of Queensland from 1996 to 2002, despite often very different quotas. Queensland had very steady growth from 1997 to 2003. From 2000 to 2002 in NSW there was a surge in harvesting activity that fell off in 2003 and 2004. These drops in harvest coincided with extended dry periods in NSW (2003, 2004) and Queensland (2004).

Another interesting feature of this graph is how closely the Queensland harvest matched the NSW quota. From 1997 onwards, the Queensland harvest data only exceeded the NSW quota twice, and not by much. The NSW harvest data showed a very strong correlation to the NSW quota, in fact the only time it dropped below a 60% utilisation rate is in 2003, when it dropped to 53%. In contrast, the only times the Queensland utilisation rates rose above 60% were in 1995, 1996, 2001 and 2004. See Table 1 for a comparison between the quota utilisation rates of NSW and Queensland.

Table 1. Quota utilisation rates of NSW and Queensland from 1995 to 2004.

<table>
<thead>
<tr>
<th>Year</th>
<th>NSW Quota Utilisation %</th>
<th>QLD Quota Utilisation %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>86%</td>
<td>98%</td>
</tr>
<tr>
<td>1996</td>
<td>96%</td>
<td>87%</td>
</tr>
<tr>
<td>1997</td>
<td>92%</td>
<td>45%</td>
</tr>
<tr>
<td>1998</td>
<td>80%</td>
<td>56%</td>
</tr>
<tr>
<td>1999</td>
<td>61%</td>
<td>42%</td>
</tr>
<tr>
<td>2000</td>
<td>64%</td>
<td>49%</td>
</tr>
<tr>
<td>2001</td>
<td>80%</td>
<td>61%</td>
</tr>
<tr>
<td>2002</td>
<td>73%</td>
<td>48%</td>
</tr>
<tr>
<td>2003</td>
<td>53%</td>
<td>56%</td>
</tr>
<tr>
<td>2004</td>
<td>68%</td>
<td>70%</td>
</tr>
</tbody>
</table>

Any number of conclusions can be drawn from the above figures and table, but the one thing that does stand out is the similarity between the Queensland and NSW harvests despite the differences, often very large, between the size of the quotas, harvest areas and seasonal conditions.

We compared the total data sets from 2001 – 2004 to see if some regional comparisons can be made between NSW and Queensland. To do this, we amalgamated NSW Kangaroo Management Zones and their data into 3 regions roughly matching the geography of the Queensland regions. That is:

- Western Region = KMP Zones 1, 2 and 4;
• Central Region = KMP zones 6, 7, 8, 10 and 12; and
• Eastern Region of NSW = KMP zones 9, 13 and 14, and in 2004 the newly designated South-east NSW KMP trial zone.

See Map 2 (below) for an overview of these regions.

Map 2: NSW Kangaroo Harvest Zones  
Source: DEC Kangaroo Management Program

While this is only an approximation, the report uses the regional breakdown to help provide an idea of how closely the NSW harvest matches the trends observed in Queensland. Given that NSW doesn’t have a skin-only harvest, the report used total harvest data for regions in both states for the comparison. Total quota utilisation rates, rather than regional quota utilisations rates, were used simply due to the fact that up until 2005, Queensland didn’t have regional quotas.

Figure 26 (see below) shows the Eastern Regional data for both NSW and Queensland closely matched in terms of scale for 2001 and 2002. In 2003 the Queensland harvest in the eastern region increased by close to half, while the NSW harvest continued its steady increase. In 2004 the gap closed again to similar scales of 2001 and 2002. This was primarily due to two factors:

1. the Queensland harvest waning; and

2. the introduction of the new KMP harvest zone, ‘South-east NSW’, centred around Queanbeyan.

It is interesting to note that without the new zone being introduced, the actual harvest in the NSW eastern region would have declined by 3000 animals from 2003. This would have matched more closely the trends evident in the Queensland harvest data.
Figure 26. Queensland and NSW Eastern Region Harvest Totals (2001 – 2004).

Figure 27 shows that the NSW and Queensland harvests displayed a similar trend in the Central Regions. There was stronger growth in the NSW harvest on average over this period, but the harvest also dropped off at a quicker rate as a result of drought-induced population declines and the consequent reduction in annual quota in these areas.

The apparent comparatively stronger NSW growth rates may have been an artefact of the sheer scale of the Queensland harvest and the volume of numbers needed to have an impact on the rates, or it may be that in fact, the NSW Central Regions growth was stronger.

Figure 27. Queensland and NSW Central Region Harvest Totals (2001 – 2004).

While the Eastern and Central region harvest trends in NSW and Queensland were similar, there is little correlation between the Western Region harvest of NSW and that of Queensland (Figure 28). While the NSW harvest was growing from 2001 to 2002, the Queensland harvest was declining. In 2003 the NSW harvest declined by 123% from the previous year, while the Queensland harvest increased by over 50%. The only time that the two harvests had similar trends is in 2004 when they both declined, as did every other regional harvest during that year.
The NSW Western Region harvest dwarfed that of Queensland’s despite the region being of a similar geographic size. One reason for this may have been a reflection of how this study has re-arranged the NSW management zones to match the Queensland situation. It is impossible to accurately match all landscapes between the two states. There is some crossover of landscape types in the border regions, however further investigation of settlement patterns and bioregions shows that the southern end of the Western Region in NSW is more productive in general than the Central and Northern regions of the Queensland Western Region. Furthermore, kangaroo densities in the central and northern parts of Queensland’s Western Region are extremely low, often cited as being due to the combination of unproductive landscapes combined with no dingo protection ie. outside the barrier fence, and large extensive cattle properties that undertake no dingo control whatsoever. This could possibly result in greater kangaroo numbers in the NSW Western Region compared to Queensland’s. The NSW Western Region is far more settled than that of the Queensland equivalent, resulting in greater populations (human) and infrastructure resources to facilitate the commercial kangaroo industry. As NSW has a far longer history of zonal kangaroo management, it is possible that this has also influenced the rate of harvest in far western NSW.

These regional variations do not explain the massive (123%) slump in the NSW harvest between 2002 and 2003. Drought maps from the NSW DPI Website (2005) show that from about July 2002 the entire harvest area of NSW was drought declared. This situation eased from approximately September 2003 to about April 2004, but then declined again into drought covering most of the harvest areas. This is the most likely major cause of the significant slump in harvest during this period, ie lack of numbers and poor quality due to drought. Much of the Queensland harvest area was similarly drought affected from 2003 well into 2004. This is reflected in the drop in harvest in 2004.

4.3.2 Discussion

The Queensland and NSW trends were consistent excepting in quota utilisation. NSW on average had roughly 20% higher quota utilisations than Queensland from 1997 to 2002 as seen in Table 1. The exception was for 2003 and 2004 when climate impacted upon both harvest and quotas. Looking at the actual harvest numbers shows that while Queensland had a much higher quota on average than NSW, the actual harvest was only marginally greater. This suggests that the harvest was driven by the market and economically available kangaroos rather than quota availability. This implies that the market forces and the number of economically available kangaroos in NSW and Queensland were similar if the harvest numbers are similar. The regional similarities especially in the Eastern and Central Regions tend to support this theory.

If this is the case than there are a number of implications, including the fact that if the industry and market continues to grow at a similar rate as it has from 1997 until the droughts of 2003 and 2004,
then the NSW quota may be consistently closer to being fully utilised a lot sooner than the Queensland quota, thus replicating the circumstances of 1996 when the skin-only shooting moratorium was introduced initially.

Regional variation in NSW was most obvious in the Western Region. Like its Queensland counterpart it followed very different trends to the remainder of the state. The Western Region harvest dropped in 2003 unlike the other NSW regions, and the magnitude of decline was far greater than that experienced in 2004 in the other NSW regions. This could be a result of the drought hitting these western areas sooner and harder than the other regions or that it became less economically viable to harvest at the 2001 and 2002 level. Most likely a combination of both has occurred, with drought being the primary driver.

Apart from the small variation caused by the introduction of a new harvest area in the Eastern Region of NSW in 2004, there was a high regional correlation in trend between the Central and Eastern Regions of Queensland and NSW.

4.3.3 Key points

- Overall rise and fall of the quotas and harvests in NSW and Queensland were similar, although quota utilisation rates differed.
- The NSW harvest utilised a higher percentage of the available quota than Queensland on average (roughly 20% more from 1997 to 2002), but total harvests were similar, suggesting that both markets were driven by similar market forces on a similar scale.
- The slump in harvest in 2003/2004 was probably caused by the drought and was experienced in every region of both NSW and Queensland, excluding the introduction of the new harvest area in the NSW Eastern Region. Anecdotal evidence suggests that it was the seasonal conditions that limited the harvest rather than markets. The Eastern and Central Regions of NSW were very close in terms of trends to their corresponding regions in Queensland.
- Eastern region numbers were biased in 2004 by the introduction of the new South-east KMP zone into NSW.
- The trends in the Western Regions of both states differed from each other and the other regions in each state except for the 2004 decline.
- The harvest in the NSW Western Region was halved between 2002 and 2003, probably due to primarily to the drought.
5. Impacts of the re-introduction of the Skin-only on Key Stakeholders

This section of the report is dedicated to the identification and analysis of the advantages and disadvantages of skin-only shooting for each major stakeholder group.

The key stakeholders have been identified as those who have a direct involvement in the kangaroo harvest. For this report they are:

- Landholders and landholder-based organisations;
- Trappers;
- Fauna Dealers (wholesale), Skin Dealers and to a lesser extent Fauna Dealers (restricted);
- Animals Liberation groups;
- Animal Welfare groups; and
- Government.

5.1 Landholders

5.1.1 Introduction and position on Skin-Only harvest

The majority of landholders who want kangaroos shot on their property are primary producers who feel that the kangaroos are competing for scarce and valuable resources (eg pasture) or impacting heavily on crops. Kangaroos are also seen by some as a potential source of supplementary income.

Landholders who wish to have kangaroos shot on their property must apply to DEC for a Commercial Occupiers licence, valid for up to 4 months. They then nominate a licensed Kangaroo Trapper to harvest the specified number and species of kangaroo for that licence. It’s quite common to have overlapping licences on the one property, with either the same shooter or different targeting different species.

In a submission to DEC for this report (see appendix 2), the NSW Farmers Association supports the idea of skin-only shooting as it represents an alternative income for regional Australia with the added perceived benefit of limiting total grazing pressure. Members believe that when shooting under non-commercial (NC) licences, a skin-only harvest represents an avenue for farmers to re-coup their costs. They state that the KMP and associated licensing provisions should allow for skin-only shooting under licence, and that this licence should cater for those periods in which commercial harvesters are unavailable.

5.1.2 Positives and Negatives of Re-introduction

The following table provides a list of the positives and negatives for landholders if skin-only shooting were re-introduced. This list has been compiled from the submissions received and interviews with industry members and government staff.

<table>
<thead>
<tr>
<th>Positives</th>
<th>Negatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Additional funds for producers in remote areas [would still need to obtain a S123 Trapper’s Licence].</td>
<td>• May weaken the market with inferior quality skins/patchy supply = less money for farmers (if they are the trappers).</td>
</tr>
<tr>
<td></td>
<td>• This can affect the long-term viability of the industry</td>
</tr>
<tr>
<td></td>
<td>• ‘Less buck for your bang’ – ie. Miss out on money from carcass – wasted resource.</td>
</tr>
<tr>
<td>• Useful in areas where trappers can’t or won’t go.</td>
<td></td>
</tr>
</tbody>
</table>


- Can continue shooting when it’s too wet to get to chiller boxes.
- Indirect economic returns from non-commercial (damage mitigation) culling, such as using carcases for baiting or working dog food.
- Low cost of joining the industry; that is no chiller boxes, vehicle with trays, etc.
- Shoot more with fewer trips to town
- Meeting quota in local KMP zone

| | Can encourage those with an unprofessional attitude to join
| | The quota is designed to allow a harvest of animals while not impacting adversely on overall kangaroo populations or population viability. So in terms of population control, the harvest is not an effective option. In terms of money, the harvest is driven by the market and climate
- Shoot a bigger percent of the population (within quota limits), that is you can shoot smaller kangaroos when you are not focussed on carcass size.
- Shooting smaller kangaroos increases time for population rebound (positive for landholders), this results in smaller quotas for a longer time resulting in a weaker industry.
- Processors prefer bigger skins as it takes the same amount of $ to process a large skin as it does a small, therefore product may not get bought = no money.
- Shooting smaller kangaroos increases time for population rebound, this results in smaller quotas for a longer time resulting in a weaker industry (negative for industry).
- Pest mitigation during drought/Exceptional Circumstances

| | Not compatible with management objectives for the KMP.
| | Dealing with carcass waste – pest mitigation problems with providing food sources for foxes, pigs, etc.

5.1.3 Discussion

From the above table it is clear that the key positives presented by the farming lobby for the reintroduction of skin-only shooting may have some negative impacts as well. The NSW Farmers Association supports skin-only shooting when commercial harvesters are unavailable. It is hard to see under what circumstances professional trappers would not be available, given the well serviced nature of the industry in NSW, in terms of chiller boxes, etc. It would probably be in those times that uneconomic densities of kangaroos are occurring in an area that some gain could be made if skin-only harvest was allowed. Landholders shooting the odd kangaroo for skin-only purposes whilst going about their daily business on the property would still be able to harvest when populations are below a commercially viable density for carcass trappers. This would need to be defined to enable compliance and licensing conditions to be met.

Assuming that an adequate definition is developed the issue then becomes who is eligible to shoot kangaroos for their skins and under what circumstances.
Who gets to shoot skin-only?
In the submission, the NSW Farmers Association states that skin-only harvest will be an additional source of income. If this is the case, it means that the farmers themselves must go out and shoot the kangaroos, skin them, salt the skins and bring them to a Fauna Dealer to be sold to gain the maximum economic gain. If the farmers were to employ professional trappers, they would not receive any income from the skin harvest, thus negating the argument of additional income.

There are two ways that this could happen. The farmer could get a special licence or the current licence arrangement could be broadened to allow trappers to harvest skin-only (as in Queensland) and the farmer apply for a Trappers licence as well as the Occupiers licence. This last option would mean that anyone with a licence could shoot for skins and the farmers would be essentially trappers themselves (this already exists).

When do they get to shoot skin-only?
The question of when skin-only shooting should be allowed also needs to be addressed. There are four main options in relation to when; they are:

- skin-only shooting could occur when trappers are not available;
- skin-only shooting could be allowed to occur in areas that have been drought or Exceptional Circumstance declared;
- only farmers with special licences are allowed to shoot for skin-only; or
- skin-only shooting could occur anywhere in the harvest area at anytime.

There are a number of problems with all these options, mainly around the compliance and administrative burden that conditional licensing creates, so the easiest option to manage would be to open up skin-only harvest to anyone at anytime, as this would reduce the administrative burden of issuing special licences under certain conditions. The compliance burden would be increased whatever option was introduced.

Making money from skins depends a lot on the market at the time, and finding a processor who wants to buy the skins. Skin processors in Queensland now prefer buying the skins from meat processors because of the freshness of the product with very few skins being bought from the trappers themselves. Poor curing and/or storage methods can damage the skin. This damage is only discovered later in the tanning process, after the trapper has been paid and consequently reduces the profits for the processor. However, having a skin-only harvest does provide the capacity to rapidly respond to an increase in the market, this can be a benefit if the sizes and quality of the skins are such that they support the market, not damage it as in 1996. In an interview with a skin processor in NSW, it was stated that their preference was to obtain skins from meat processors regardless of where they are located, that is either in NSW or Queensland.

The farming lobby group suggests that there maybe an economic opportunity for skins harvested from kangaroos shot for damage mitigation purposes if the carcasses can’t be harvested as well. There is a problem with this option, as damage mitigation and the commercial harvest need to be separate. If some commercial gain is made from damage mitigation it will need to be incorporated into the Wildlife Trade Management Plan where it will not stand up to scrutiny at an Administrative Appeals Tribunal. The current KMP deliberately makes no mention of damage mitigation, because it would have been so difficult to defend. The same step of separating the two regimes was also taken in Queensland and Western Australia as no-one was prepared to try and defend their damage mitigation activities through an Administrative Appeals Process and risk the overturning of commercial harvest as a result. NPWS would also be obliged to ensure that shooters on non-commercial licences completed the accreditation courses that professional shooters do, which would be an unpopular formality.

Peter Morris (pers. comm.) remembers that some graziers used to shoot the occasional kangaroo as they drove round their properties. They would skin them, salt them and store them until they had enough to sell, however this practice would only be legal under the current legislation if they were all
shot and tagged within the four month licensing period. Theoretically, under current regulatory arrangements, skins would not need to be sold within the licence period; however this would need to be changed. If skins were not sold in the 4 month period there would be no feasible way of knowing if the animal had been shot when it should have been. Secondly, stockpiled skins that could be held for longer than the 4 month period could have serious and expensive implications for the tracking of harvest against quota.

Using skin-only harvest to help meet local KMP quota.

As shown in the previous section, the Queensland harvest has in recent history been driven primarily by the market. This is apparent through the steady growth in the harvest despite often large variations in the quota. This also appears to be the case in NSW. Another key factor that impacts on the harvest is seasonal conditions, as evidenced by the declines during 2004 in both NSW and Queensland and 2003 in NSW, due to drought.

The question is would opening up the skin-only harvest allow these zonal quotas to be filled? Using the Queensland example again the short answer is “no”, with only 8% of the harvest going to skin-only. This is despite the bigger area and longer distances between infrastructure for skin/carcass processing. The focus of the harvest in Queensland is on carcass, with the skin-only harvest possibly derived from carcass shooters who skin kangaroos that do not meet the carcass harvest standards. Even the traditional stronghold of skin-only shooting in Queensland, the Western Region, is now dominated by carcass shooting. It should also be noted that that severe drought also impacts on skin quality due to loss of body condition. Attempts to take kangaroos at the point between when the loss of body condition makes them unattractive for a carcass, but the skin quality has not yet declined is not feasible as condition is too hard to establish in field situations, a factor that leads to the inadvertent harvest of underweight carcasses in Queensland and the consequent removal of the skin for sale.

In response to this issue, members of the kangaroo industry have claimed that they can get kangaroo trappers to anywhere there is a problem with kangaroo numbers, negating the need for this option. In our opinion, the ultimate factor that will decide if the entire quota is met, based on current trends, is economics. If the quota can be met for a profit then it will be met. Given that recent trends have shown increasing quota utilisation rates, only slowed by extreme seasonal conditions, it is possible that quota utilisation rates similar to those of 1996 will be experienced again.

Re-introducing a skin-only harvest in NSW will provide farmers who wish to, the opportunity to shoot kangaroos for skins. The impact that skin-only shooting is likely to have on populations is negligible, assuming that quotas are not exceeded. Given current trends in Queensland it could be expected that the skin only harvest would not exceed 10% of the total harvest primarily because there is too much money in skin/carcass harvest. However, given that the NSW quota is utilised to a greater extent than Queensland’s on a regular basis, it may impact on the availability of the skin/carcass harvest for trappers. This brings us back to the original argument from 1996 about maximum utilisation.

Pest/Feral animal impacts.

The other argument from 1996 is the issue of inadvertently favouring pest animal species, eg the European red fox. The farmers feel they can deal with this by burning, burying or using the skinned carcass for baiting or dog food. At present there is no empirical data regarding the impacts of skin-only harvest on pest animal populations. However, common sense tells us that it could not be hindering populations of pest animals. The degree to which carcasses aid pest animals needs further exploration. There are questions over the enforceability and economic sustainability of burning or burying unused skinned carcass on a regular basis, especially if the harvest occurs on a medium to large scale (i.e. 50 - 100 animals in a night).
5.2 Fauna Dealers (wholesale), Skin Dealers and Fauna Dealers (restricted)

5.2.1 Introduction and position on Skin-Only harvest

In NSW only fauna dealers (wholesale) can buy from licensed trappers. The number of fauna dealers (wholesale) is restricted to 11. However these dealers can have any number of dealer (chiller) sites located anywhere within the state. Fauna dealers (wholesale) can process the carcass or sell the skin and/or carcass to other licensed processors. Fauna dealers (wholesale) can sell the meat products to retailers, the public or export overseas (if they have an export licence). Skin dealers buy their skins from the fauna dealers (wholesale) and tan or process the skins into products to sell to retailers or to the public.

From interviews with fauna dealers (wholesale) and skin dealers in both Queensland and NSW, it is clear that they do not want the re-introduction of the skin-only harvest. They do not want to see any loss of quota to a less valuable and more variable supply of product, or see the market destabilised through opportunistic harvesting and/or supply. They feel that due to the high quota utilisation rates of the harvest in recent years that a maximum utilisation policy should remain in place, this position was also stated in a report by Resource Consulting Services in 1999. However in a submission to this process, a representative of the Australian Game Meat Producers Association stated that they were open to the idea of re-introducing skin-only shooting in years to come if:

- full utilisation was not enough to control numbers (not consistent with the aims of the KMP); and
- animal welfare issues could be covered.

5.2.2 Positives and Negatives of Re-introduction

The following table provides a list of the positives and negatives for Industry members if skin-only shooting was re-introduced. This list has been compiled from the submissions received and interviews with industry members and government staff.

<table>
<thead>
<tr>
<th>Positives</th>
<th>Negatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater ability to rapidly respond to skin market demand</td>
<td>Short term fix to ‘hot markets’ leads to instability in the markets</td>
</tr>
<tr>
<td></td>
<td>Increased potential for drop in skin quality and size resulting in smaller profit margins followed by a market decline or collapse</td>
</tr>
<tr>
<td></td>
<td>Supply is variable, especially if tied to drought or exceptional circumstance listings, again doesn’t help create stability</td>
</tr>
<tr>
<td></td>
<td>Skin shooting often targets smaller kangaroos that are better left in the paddock. Removing young kangaroos slows population recovery.</td>
</tr>
<tr>
<td></td>
<td>Minimum use of resource rather than maximum, the economics of the industry is that everyone is better off with maximum utilisation – maximum return from each animal</td>
</tr>
<tr>
<td></td>
<td>Due to a considerably smaller amount of money needed to get into skin shooting, it</td>
</tr>
</tbody>
</table>
5.2.3 Discussion

From the arguments presented by the processing side of the industry, there seem to be limited positives resulting from the re-introduction of skin-only harvests. Processors feel that the ability to rapidly respond to short term demand costs them in terms of long term industry stability.

One of the key issues that processors have regarding the skin-only harvest is the variability in supply and quality. Catherine Money of the CSIRO (2002) found that ‘prolonged storage of pickled skins, especially at high temperatures, was found to cause degradation of the skins resulting in a loss of strength in the resulting leather’. Often poor curing and/or storage impacts on the skin aren’t noticed until the skins have been pickled. This means that the processors are paying money for skins they can’t use. This is why in Queensland the majority of skins are bought from meat processors as the skins are fresh. Any problems experienced during processing are due to internal issues rather than the skins themselves. Processors have also noticed an improvement in the quality of the skins through improved techniques for handling carcasses.

In 1996 there was a very high demand for skins and a relatively small quota that apparently led to a lot of poor quality material being processed (either very small or poor quality). To counteract this, the industry successfully lobbied for the introduction of a larger minimum size from 4 sq ft to 5. This provision was dropped the following year after a slump in the skin market. Industry feels that skin-only shooting allows smaller kangaroos to be targeted when they are better left in the paddock, of course this would depend on what, if any, minimum size was introduced to go with it.

For industry, there are some obvious solutions to these problems:

- Do not buy skins from the trappers/farmers; and/or
- For skin size problems – introduce a minimum size limit 4 - 5 sq ft; and/or
- For curing or storage problems, either:
  - Introduce a manual/ code of conduct(?) for curing and storing skins; or
  - Buy only fresh or frozen skins.

The support from the Australian Game Meat Producers Association depends on the condition that the quota could not be met by maximum utilisation and that the animal welfare issues were covered. They felt that this would probably not be the case, in terms of quota utilisation, for some years to come.

5.3 Trappers

5.3.1 Introduction and position on Skin-Only harvest

Trappers are the people who go out and shoot the kangaroos for their meat and skins. They rely upon farmers to allow them access to their land and the supply of tags. After shooting the kangaroos the trappers sell their harvest to the fauna dealers (wholesale), who then process the meat and sell the skins or on-sell animals to other dealers.

It is unclear as to whether the trappers support the re-introduction of skin-only harvest as no submission or previous correspondence was received. It is assumed that their support would be largely dependant on the conditions, if any, imposed upon the harvest. It can further be assumed that trappers will prefer to shoot to gain the best economic return, which will usually mean shooting for carcasses.
5.3.2 Positives and Negatives of Re-introduction

The following table provides a list of the positives and negatives for Trappers if skin-only shooting were re-introduced. This list has been compiled based on our previous experience with industry members and interviews with government staff.

<table>
<thead>
<tr>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Another avenue for money or recoup costs, similar to that of Queensland if the kangaroos do not meet carcass standards.</td>
<td>• If the harvest becomes available to farmers only, it may become a negative with loss of availability of kangaroos and/or properties to shoot on.</td>
</tr>
<tr>
<td>• Option if in remote areas where carcass chillers may not be economically viable.</td>
<td>• Loss of quota to a less valuable commodity</td>
</tr>
<tr>
<td>• Option if it is too wet to transport carcasses to a chiller box or to get to kangaroos in the paddock</td>
<td></td>
</tr>
<tr>
<td>• Skins are easier to transport and store, therefore trappers can stay out longer.</td>
<td></td>
</tr>
</tbody>
</table>

5.3.3 Discussion

Trappers would probably support the re-introduction of skin-only shooting if it was open to all trappers in all areas at all times. The effect may be similar to that in Queensland, which is to provide an option for economic return if a kangaroo is underweight or body shot. The NSW stakeholders should think very carefully before allowing this loop-hole which is a constant thorn in the side of the Queensland program (see section 4.5 on welfare as well). It is not possible at this point in time to accurately match a skin size with a carcass weight, so by providing a skin-only harvest, it also provides an opportunity for trappers to take animals that couldn’t ordinarily be harvested just based on the weight of the animal.

The re-introduction of skin-only shooting might also allow some to venture into more remote areas to harvest, although there doesn’t seem to be evidence of this occurring to any great extent in Queensland. The harvest seems to be driven by the market in Queensland with skin-only shooting being a very small player due to the higher profitability involved in the skin/carcass harvest. There is no reason to think that this wouldn’t also be the case in NSW.

If the harvest was limited to farmers or at certain times, trappers may regard the loss of harvestable quota to a less valuable outcome as a negative.

5.4 Animal Rights/Liberation groups

5.4.1 Introduction and position on Skin-Only harvest

It is our opinion animal rights/liberation groups have effectively removed themselves from providing any constructive input into how the industry is run and operated in NSW, as they vehemently oppose the harvesting of kangaroos whether it is carcass and skin, or just skin. In effect, as long as the industry continues they will oppose it.
Given this stance it is clear that the animal liberation groups will oppose the re-introduction of skin-only harvest in NSW. No submission was received from animal rights groups.

5.4.2 Positives and Negatives of Re-introduction

The following table provides a list of the positives and negatives for animal rights/welfare if skin-only shooting were re-introduced. This list has been compiled from interviews with industry members and government staff.

<table>
<thead>
<tr>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>• May provide extra impetus for campaigns against the industry.</td>
<td>• The harvest of kangaroos continues.</td>
</tr>
<tr>
<td></td>
<td>• Possibility of less professional operators entering the industry.</td>
</tr>
<tr>
<td></td>
<td>• Increased incentives for trappers to shoot undersize kangaroos.</td>
</tr>
<tr>
<td></td>
<td>• Easier for illegal trapping to occur.</td>
</tr>
<tr>
<td></td>
<td>• Increased potential for over-harvesting local populations</td>
</tr>
<tr>
<td></td>
<td>• Depending on conditions imposed, reduction in animal welfare outcomes (eg. allowing skinning of body shot kangaroos).</td>
</tr>
</tbody>
</table>

5.4.3 Discussion

Given the animal liberationists’ stance it is hard to find anything that they may perceive as a positive as a result of the re-introduction of the skin-only harvest. However, current government policy ensures that the harvest will continue as long as:

- it does not threaten population dynamics of the commercially available species. Animal rights/liberationists argue that it does affect the population dynamics. Many studies have shown that this is not the case if the quota is less than 20% of the total population;
- it supports an industry that is a significant rural employer in NSW; and
- it contributes to the State economy.

5.5 Animal Welfare groups

5.5.1 Introduction and position on Skin-Only harvest

Animal welfare groups should be treated as discreet from the Animal liberation lobby. Animal Welfare groups are primarily concerned that animals should not suffer as a result of human activity. As a general rule animal liberation lobbyists believe that no animal should be used as a part of a human activity. Animal welfare groups, while not necessarily condoning the commercial utilisation of wildlife, can see that it will continue. Their main interest in the program is that it continues to focus on the welfare issues of the harvest, i.e. humane shooting of kangaroos and culling of dependant joeys, etc. In Queensland, as long as the animal is shot humanely, animal welfare representatives are not concerned with what is done with the remains.
In a submission to the report, the RSPCA has stated support for the harvest of kangaroos only as long as every effort goes to ensuring that it is done in a humane fashion, in the absence of effective humane, non-lethal control options for overabundant populations.

5.5.2 Positives and Negatives of Re-introduction

The following table provides a list of the positives and negatives for animal welfare stakeholders if skin-only shooting were re-introduced. This list has been compiled from the submissions received and interviews with government staff.

<table>
<thead>
<tr>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Increased enforcement effort to ensure compliance with code of conduct.</td>
<td>• Increased compliance load without significant increase in resourcing</td>
</tr>
<tr>
<td>• Body shots are more obvious in a skin than a carcass</td>
<td>• Very few skins are checked in Queensland for body shots, when found = too late.</td>
</tr>
<tr>
<td></td>
<td>• Increased potential for less professional attitudes to enter the industry</td>
</tr>
<tr>
<td>• Unlikely to have any negative effects on overall population levels because the harvest will still be governed by a sustainable quota</td>
<td>• Skin shooting gives the ability to hit localised populations very hard</td>
</tr>
</tbody>
</table>

5.5.3 Discussion

From the animal welfare standpoint, as long as humane culling methods are employed on all affected animals (i.e. joeys as well), then the reintroduction of the skin-only harvest isn’t really an issue. However, there may be a concern that the skin-only harvest could encourage a less professional attitude. While this would not be the case with every skin-only shooter, it is a possibility given the substantial drop in investment needed to do skin-only harvesting, that the ‘yahoo’ element (Andrew Lewis pers. comm. 2005) could be encouraged to enter the industry.

Some skins sold in Queensland are also undoubtedly from animals that have been body shot. NSW currently imposes licence conditions such that a body shot roo cannot be possessed or sold, and they have a zero tolerance policy (ie. Instant fine, no warnings). The object of this licence condition, in conjunction with the Code of Practice conditions, is to remove any financial benefit from not head-shooting kangaroos. Queensland does not have this policy; instead states that a heart shot animal can be sold as per the provisions of the Code of Practice which provides for a body shot if a head shot is unsuccessful in obtaining sudden and painless death. Queensland takes the view that compliance actions will uncover those that body shoot as a matter of course, and they can still be prosecuted for not following the code of practice. It’s justification for not having a nil tolerance policy is that under current arrangements, at least body shot animals can be found in the market place and therefore the same number of mistakes occur, but they can not be monitored as the animal remains in the field.

Carcass processors will not accept body shot animals for meat production purposes in NSW or Queensland. Skin producers on the other hand, probably will not realise that a skin has been body shot until someway through the tanning process. Therefore the opportunity still exists for trappers to skin an animal that has been body shot and sell the skin for a profit in Queensland. To allow this to occur in NSW contradicts the animal welfare objectives of the combination of the applicable conditions and groups like the RSPCA may not support this move.

It should be noted therefore that animal welfare groups are probably unaware of some implications of different harvest regimes that can impact on welfare considerations, but these groups will not hesitate
to use extreme political pressure should an adverse impact be noted. Also worth noting is a body shot skin, whilst easier as individual items to note a hole in than a carcass, can easily be lost due to the practice of bundling skins up into piles and pallets of 10 and 100’s of skins. Compliance officers find it difficult to unbundle skins and view each one and skins in a tannery are present in such large and disorganised piles and stacks that it is simply not feasible to check each and every skin for bullet holes. Most carcasses however get checked by industry vets and other representatives.

5.6 Government (DEC)

5.6.1 Introduction and position on Skin-Only harvest

The government introduced the moratorium on the skin-only harvest in 1996 in response to shrinking populations and increasing demand. A preference was held for maximum utilisation of the carcass and pest mitigation (ie. Removal of waste carcasses/carrion from the environment). However due to pressure from external lobby groups the government is reviewing all the evidence to determine whether or not provision for skin-only shooting should be re-instmted.

The government has given no indication whether it supports the re-introduction of skin-only shooting, but as it seems that the situation has eased only a little from 1996 in terms of quota utilisation, the policy of maximum utilisation may still be in favour.

NSW DPI (Far West) has indicated that it does not support the permanent banning of skin-only shooting in NSW.

5.6.2 Positives and Negatives of Re-introduction

The following table provides a list of the positives and negatives for government if skin-only shooting were re-introduced. This list has been compiled following interviews with government staff.

<table>
<thead>
<tr>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Get the subject off the political agenda from some quarters</td>
<td>• May result in increased political pressure from other quarters</td>
</tr>
<tr>
<td>• No real increase in the administrative burden in Queensland.</td>
<td>• Could effectively double data entry load by the need to enter two sets of data from every trapper return.</td>
</tr>
<tr>
<td></td>
<td>• Conditional licensing arrangements are time consuming and consequently costly to manage.</td>
</tr>
<tr>
<td></td>
<td>• Increased compliance load (see section 5.2). Two types of product will need to be monitored. Skin misdemeanours are notoriously hard to prove, gaining evidence and prosecution is difficult due to the ability to hide, move and destroy product quickly.</td>
</tr>
<tr>
<td></td>
<td>• Skin-only shooting has particular implications for black market trade particularly in far western areas. Animals can be shot, stored, transported interstate and sold well away from any public</td>
</tr>
<tr>
<td></td>
<td>• Decrease in industry stability</td>
</tr>
</tbody>
</table>
5.6.3 Discussion

For DEC one of the biggest issues regarding the re-introduction of skin-only harvest will be compliance. The politics of the harvest are discussed further on, but suffice to say it will never be fully off the political agenda whatever choice is made. From conversations with compliance officers from Queensland and NSW the following points are made:

- skins are very easy to hide and transport unobtrusively, so that it is impossible to determine when the animal was shot;
- Untagged skins are also easy to hide amongst tagged skins when selling, having potentially serious implications on the quota; and
- There is less investment in equipment for skin shooting, allowing the “yahoo” element to infiltrate.

If the skin-only harvest is re-introduced, then it will add a level of complexity to the current compliance effort. However on the upside, in Queensland, the skin-only harvest has no effect on the administrative burden. It is probably safer however to attribute this to the current Queensland administrative arrangements being designed in the presence of skin-only harvest, rather than making the assumption that it will create no further administrative burden if introduced into a system that currently does not provide for skin-only harvest. The legislative impacts will be discussed further on. Suffice to say here that in NSW there is little to be done initially to re-introduce the skin-only harvest. This will be discussed in more detail in the Compliance and Administration part of section 5.

While industry stability is not a government responsibility, it is in the government’s interests to support the industry given the level of economic outcomes that come from the harvest of kangaroos in NSW. Also as the commercial harvest is a statutory responsibility of DEC, anything that causes the harvest to fail reflects on the agency. However given the current focus in Queensland on skin/carcass harvest, the amount of skin-only shooting would probably have a negligible impact on the industry in NSW if the quota utilisation rates were to stay at or below the current levels.

DEC also feels that there is a moral responsibility to support animal welfare standards, which will be made more difficult if skin only harvesting were to be reintroduced. The additional compliance burden would probably require additional staff resources, and as the program is fully funded by industry fees, it would be industry that would ultimately cover the cost of an increased compliance burden. As industry has stated that it would rather forego a skin-only harvest in favour of industry stabilisation, this result would hardly seem equitable.

The NSW DPI Far West office has indicated that the DPI does not support the permanent banning of skin-only shooting. They feel that if the meat processing industry is unable to take close to the full quota each year, then skin-only shooting should be available to allow the quota to be taken.
6. Impacts of the re-introduction of skin-only shooting on NSW legislation, administration and compliance efforts

6.1 Legislation

6.1.1 NSW Legislation

There are no changes needed to the NSW legislation to allow the re-introduction of skin-only shooting. The only change needed will be in the Commonwealth approved Wildlife Trade Management Plan, known as “The New South Wales Kangaroo Management Program 2002 – 2006”. In Section 1 of this plan, under heading ‘1.1 Occupiers Licence’, the fourth dot point states that “The licence will not be issued for skin-only shooting”. This would need to be removed and some minor changes made to the rest of the wording in that section to allow skin-only harvest to occur. However, nothing is as easy as it seems. This change in wording may have an impact in the Commonwealth consideration of the program under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).

Advice from DEC also indicates that licence conditions would also have to change, and while this is not legislation, it would represent a moderate cost in amending the specialised licensing database.

6.1.2 Commonwealth Legislation

The Wildlife Trade Management Plan will require approval under the EPBC Act. There are a number of criteria that need to be addressed, including:

- The status of the kangaroos;
- The extent of habitat;
- Threats to survival (both harvest and non-harvest);
- The impact of the activities covered by the plan on the habitat or relevant ecosystems;
- Management controls directed towards ensuring activities are ecologically sustainable for kangaroos; and
- Whether activities will be detrimental to the survival and conservation status of kangaroos and any relevant ecosystems.

The plan must include measures to:

- Mitigate or minimise environmental impacts;
- Monitor the environmental impacts; and
- Respond to changes in the environmental impacts.

Another stand-alone legislative requirement is that the conditions applicable to the welfare of the harvested animals are likely to be complied with.

Following their respective approvals by the commonwealth, all Wildlife Trade Management Plans relating to kangaroos that are in operation around Australia were appealed by a consortium of anti-harvest lobby groups. Although none of the plans were overturned as a result, the level of scrutiny applied to the individual State plans and programs was considerable. In our opinion it is highly likely that the new NSW Wildlife Trade Management Plan will also be appealed. With this in mind, we recommend that the already tried and tested model of the current arrangements is adhered to wherever possible. The loss of an appeal at the federal level will mean that no export of kangaroo products is permissible by law from NSW. This will destabilise the industry to a significant degree. It is very important that a decision to re-introduce skin-only harvest to provide short term economic advantage to some stakeholders does not jeopardise the viability of the industry generally, therefore leading to more and more economic disadvantages for all involved.

Most importantly it is essential that the commercial harvest remains very clearly distinct from damage mitigation arrangements. The damage mitigation programs in most states are clearly indefensible under the requirements of the EPBC and that is why all recently approved programs do not mention...
damage mitigation at all. Moves to relieve landholders of the pressure to carry out damage mitigation activity and be able to sell the skin commercially will also be difficult to defend in an Administrative Appeals Tribunal process. Being able to generate income from animals taken for ‘damage mitigation’ is likely to lead to an increase in claims of damage. As it stands now, damage mitigation costs landholders money, so there’s no financial incentive to remove more animals than absolutely necessary.

Secondly re-introduction of the skin-only harvest policy will be considered a ‘new activity/process’ under the EPBC Act. The concern is that the re-introduction of skin-only harvesting would increase the number of foxes, which in turn could have a negative impact on matters of national conservation significance including threatened species and ecological communities. If the Department of Environment and Conservation believes that the activity could be significant, a referral would need to be made under Part 7 Section 67 of the EPBC Act. The Department of Environment and Heritage would then decide whether the activity was likely to pose a significant impact on matters of national significance and is therefore a ‘controlled action’. If the new activity is considered a controlled action, it must be shown, generally through an environmental impact study, that adverse impacts of the proposed action can be successfully mitigated. The bottom line is that the referral, controlled action process under the EPBC Act is lengthy, complicated, subject to interference from outside sources (at several points community views will be sought) and risky for a program such as the Kangaroo Management Program.

Furthermore, should Department of Environment and Conservation fail to refer the issue to DEH, and the matter gets raised and successfully upheld during the Administrative Appeals processes, Department of Environment and Conservation may face a significant challenge and a very significant risk to its case. One suggestion is that Department of Environment and Conservation make those that want skin-only harvest become the proponent for the proposal. In this instance each person who wishes to undertake skin-only harvest would need to assess the location in which they intend shooting in light of the presence of matters of national conservation significance, the presence of feral animals likely to be impacting on matters of national conservation significance, and be able to argue positively that their activity will not affect either. In reality this will also represent a significant increase in management, administrative and compliance burdens for the Department of Environment and Conservation.

On the positive side, should the matter be referred and become a controlled action, there are ways of successfully mitigating impact, including control of carcass waste, not allowing skin-only harvest where the relevant threatening process is impacting on threatened species, and mitigating on the basis of a low carcass waste impact based on the Queensland case study. That said, under both the Commonwealth European Red Fox Threat Abatement Plan and the NSW Fox Threat Abatement Plan there is no recommendation that the reduction of carrion will help control the red fox, therefore the proposal may not be deemed a controlled action.

From a purely scientific perspective, further investigation of the part of carrion and its impact on feral animal populations resulting from both commercial and non-commercial harvesting of kangaroos is required. As previously suggested, however if there is no financial incentive to shoot animals non-commercially, there is also no incentive to take more than necessary and this should therefore minimise the carrion available to feral animals as a result of damage mitigation activity.

6.2 Compliance and Administration

As stated in the previous section, the impact on compliance will be appreciable based on the Queensland experience. In interviews, Andrew Lewis and Peter Morris, compliance officers for Queensland and NSW respectively, made the following points about the implications of skin-only shooting on compliance work:

- Low window for detection due to storage potential, not so with meat which is perishable.
• It is easy to store skins in bulk and get rid of them quickly. Skins are hard to detect in storage and in transport.
• Lower investment, all that is needed is a cheap truck (no load capacity needed) and a set of chains. This allows the not-so-professional element in.
• The storage potential of skins allows market trade of illegally tagged (out of date) skins in NSW.
• Easy to mix untagged skins in with tagged when dealing in lots of a thousand, etc.
• Transport trucks are easy to miss, can be any old truck rather than large refrigerated vans used for carcass transport.
• Increased potential for illegal interstate transport.
• Individuals able to harvest higher numbers of kangaroos in a short period.
• Loaded carcass trucks are a lot less mobile (easier to catch) and harder to unload than skin-only vehicles.
• As a result of all these factors, skin shooters can stay below the compliance radar a lot easier.
• Lower investment provides the ability to respond rapidly to market forces – a lot of illegality happening in short time frames.
• Skin shooters tend to shoot smaller animals, impacting on population recovery potential.
• Because they can carry a lot more skins and don’t have to unload to maintain meat safety standards, trappers can decimate local populations by stockpiling and shooting until they get the last one.
• There is a lack of self regulation regarding animal welfare; they can slip body shot etc. kangaroos through easily as the animal skins are graded a lot later in the process – well after the shooter has been paid.
• Skin identification can be difficult – city dealers don’t have to worry that anyone can identify the animals.
• There is a problem with the issue of stockpiling skins, shooting illegally outside the quota and hiding the skins and the following year, tagging them and selling them.

There are also quota implications of skin-only shooting:
• Rapid response to markets, the harvest rate can be picked up very quickly;
• High volume; carcass shooters in a night can shoot 35, while skin shooters can do 100;
• Not monitoring the quota on tags can cause quota overrun. It’s too late once they are shot, the quota is closed but nobody wants them (NSW does monitor on tags sold); and
• There are some benefits in holding the line and having no skin-only, as the perception of communities is that it is illegal and therefore is more likely to be reported.

The suggestion was made that if skin-only shooting was re-introduced, a minimum skin size should be adopted and that the head shot rule should be heavily enforced. Whilst these recommendations are great in theory, as previously mentioned it is very easy to hide a body shot skin in a large lot and compliance officers have to find the skins in the first place in order to check them.

In terms of the administrative burden it has a negligible effect in Queensland. However, it should be noted that there are no special conditions that need to be met to shoot for skin-only. Skin-only shooting can be done by any licensed trapper anywhere in the harvest area. The introduction of special conditions, circumstances or licences required before skin-only shooting could take place would place an extra administrative load on the program. Conditional licensing may result in an
increase in fees and an extra data entry component. This cost will in turn be passed on to industry as the program in NSW is fully funded by industry.
7. Political impacts of the re-introduction of skin-only shooting.

The commercial kangaroo harvest will never be fully off the political agenda as there is too much emotion tied in with the harvest. The views of kangaroos as a resource, sport, pest, intrinsically valuable native species and/or Australian icon are still prevalent in various degrees in Australia and overseas. In our view it is important to minimise this particular issue from a political point of view as the potential gain for a few does not justify the increase in resources that would be needed to deal with the issue. The arguments for and against skin-only shooting have raged for many years and will continue to rage, however at the end of the day there are very few arguments that aren’t based on opinion or emotion rather than fact. The fact of the matter is that it doesn’t matter which decision the Kangaroo Management Advisory Panel supports, there will always be controversy in the KMP. This is because there are groups involved in the discussion who have diametrically opposed views, and who will not be satisfied unless their view is met.

The science behind the harvest is based on aerial surveys to provide population estimates. These methods have been tried and tested on many occasions and found to be a reliable way of estimating the total population. This data determines the quota, and the quota is set at a level that will not impact negatively on the genetics, overall density and general vitality of the kangaroo population in NSW, under a range of seasonal conditions. So, as long as the quota is not continually exceeded, the kangaroo population will not be placed in danger as a result of the harvest. Every argument after this is based on the economic/ethical/political/cultural standpoint of the parties involved.

Using Queensland as an example, if skin-only shooting were allowed in NSW for all trappers, then the skin-only harvest is likely to be less than 10% of the total harvest. This number will probably stabilise in the single figures over the next few years simply because there will always be misjudgements in aim and weight estimations. There will always be a preference for skin/carcass harvest as long as it is more profitable per unit effort. Current trends indicate that the meat market looks set to expand rather than contract over the next few years, further driving harvest effort towards skin/carcass rather than skin-only. During the development of this report, the processors that were contacted said they bought very few skins from trappers simply because the quality is too hard to establish until it is too late. They much prefer buying their skins from other processors as they know the freshness of the product will reduce many of their problems and allow them to sell a more consistent quality product to the market.

The issue of meeting quotas doesn’t appear to be significant in Queensland with the harvest rarely approaching the quota in the last 10 years. This will not be the case if the trend of increasing market demand continues. In NSW the issue of quota exploitation rates is different because NSW has a consistently high quota utilisation. This was one of the drivers for the implementation of the maximum utilisation policy in 1996.

Skin-only shooting may impact on the availability of kangaroos for skin/carcass harvesting but probably not significantly given the current trends operating in Queensland. Industry is concerned that it might impact on the stability of the industry, with part time shooters supplying questionable products in an opportunistic way. They also feel that the skin-only harvest is a waste of the economic potential of the resource, when the demand for meat products is strong and increasing.

The farming lobby have put forward some well thought out and logical arguments why skin-only shooting should be allowed, including making money from skins that would go to waste from animals shot for damage mitigation or meat for dogs or baiting. Unfortunately, making a commercial gain from damage mitigation would severely jeopardise the NSW Wildlife Trade Management Plan’s chances of survival in an AAT hearing. Another of the key arguments presented has been to allow, “skin-only if there are no trappers available”. This argument would be very difficult to define and present in a way that would be defensible and enforceable.
7.1 **Breakdown of Stakeholder interest**

**Who wants it?**
- Primary producers
- NSW Department of Primary Industries do not want to see skin-only completely banned

**Who doesn’t want it?**
- Fauna dealers (wholesale) and skin processors

**Who doesn’t care either way?**
- Animal rights groups – want to see the harvest stopped altogether.
- Animal welfare – so long as the kangaroo and any dependants are killed humanely, the rest is irrelevant.

**Depends…?**
- Trappers – if they are allowed to skin-only shoot they may be for it, if they are not and the skin-only harvest impacts on their ability to harvest (i.e. filling quotas) then they would probably be against it.

7.2 **Key Points**

**Skin-only shooting might work in NSW if:**
- Minimum size established – currently 4sq ft in Queensland.
- All trappers have the ability to shoot for skins-only, not just a select few or under circumstances – this is more for enforcement and administrative ease.
- No setting individual quotas for skin and skin/carcass harvest – let the market forces decide.
- Develop a set of guidelines for preserving and storing skins to reduce potential for poor quality skins impacting on the industry and market.

**Skin-only shooting should be re-introduced because:**
- It would allow farmers the potential to earn a few extra dollars from otherwise wasted resource.
- Potentially useful in remote areas.
- Won’t impact on overall kangaroo population, if quotas are not exceeded.
- Won’t impact on administrative burdens (if no conditions, etc put on the skin-only harvest) and no further data entry component necessary.
- Very low costs to get started – potentially increases employment opportunities in remote areas for economically disadvantaged persons.
- Allow kangaroo trappers to get economic returns from underweight or body shot kangaroos.
- Help meet the local quota.

**Skin-only shooting should not be re-introduced because:**
- Very hard to defend commercial gain from damage mitigation at an AAT hearing, jeopardising the entire industry in NSW – everybody loses.
- Destabilise the industry with opportunistic harvesting flooding the skin markets, especially if special condition had to be met to allow shooting.
- Potential for decrease in quality of product.
- Increase in compliance resources required to meet legislative obligations and community expectations.
- Quota utilisation rates in NSW are consistently high and will continue to increase if the current trends continue.
• Not maximum utilisation of tight quota margins.
• Questions of what to do with the carcass if not used for bait or dog food – burning (completely) or burying is expensive and would negate the point of shooting for skins. Food for pest animal species. Bone chewing by cows can cause botulism or choking (occasionally).
• Could encourage ‘yahoo’ element to join.
• Often target smaller kangaroos that are better left in the paddock to help population recover.
• Can impact heavily on localised populations.
• If farmers are only allowed to shoot under certain circumstances then it will only benefit a few.
• Provide extra impetus for animal rights/liberationists to step up campaigning against the industry.
• Allow kangaroo trappers to get economic returns from underweight or body shot kangaroos.

7.3 Conclusions

There are a number of reasons why the re-introduction of the skin-only harvest might work and why it wouldn’t. As shown in Queensland the current trend is for skin/carcass harvest, this is driven by the pet food and human consumption meat market. While skins were once the mainstay of the industry, the situation has now reversed with meat becoming the major money earner. There is no evidence to suggest that this trend will reverse anytime soon.

Re-introduction will not help fill local zone quotas. As seen in Queensland where skin-only shooting is allowed, the skin-only harvest has been largely replaced by carcass shooting even in the Western Region where it has fallen from 94% in 1995 to 14% of regional harvest in 2004, accounting for just 0.25% of total Queensland harvest in 2004. The move to allow skin-only harvest for the purpose of quota utilisation is spurious with no market to absorb the animals anyway.

Overall, we recommend against the re-introduction of skin-only shooting. This is mainly due to issues of policy defensibility at a Commonwealth level and the fact that it will really only benefit a few while potentially destabilising the entire industry in NSW. Landholder groups are suggesting interweaving skin-only harvest with damage mitigation harvest, but unfortunately this scenario will be completely indefensible under the EPBC Act. Landholders would have to engage properly with the commercial aspects of the industry, becoming licensed trappers etc and taking only those animals that fit with the sustainability constraints of the program. If size restrictions are introduced on skin sizes as per the Queensland scenario, the skin-only harvest may still not meet the needs of landholders attempting damage mitigation through commercialisation of the animals they take.

Other reasons include:

• NSW has a high quota utilisation rate, this was one of the key arguments for introducing a moratorium on skin-only shooting originally; and
• Compliance implications are significant.

Whatever the decision, it should be made and adhered to, and if possible made clear that there will be no going back on that decision. Any political blow-up regarding the KMP is perilous and all stakeholders need to pull together regarding supporting a stable, transparent and professional industry.
References


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8. Appendices

Appendix A. Transcripts of Interviews with Government and Industry Representatives

Appendix B. Submissions received from key stakeholders.
Appendix A.  Transcripts of Interviews with Government and Industry Representatives
Phone interview with Qld skin processor;

10.00 am EST, 22nd November 2005.

Present: Sally Egan, CEO of processing company and Steffan Holmes

After introductions Sally explained that she was working for EA Systems, a consulting firm that has been employed by the Department of Environment and Conservation (DEC) to investigate the feasibility and implications of re-introducing a skin only take in the NSW kangaroo harvest.

Sally Egan (SE): What was your perception of what happened in 1996?
Processor (P):

- The industry was running short of quota, so there was a lot of pressure to take the smaller animals. Also skin prices were very good.
- The market at that time was overheated driven by the fact there would be shortage of material in the last half of the year.
- The meat market needed fresh material all year round.
- The industry took the decision that they needed size limits as a way to curtail the taking of uneconomical small animals using up quota.
- The industry tried to balance the supply shortfall to help the quota last all year. These measures helped the industry overcome the difficulties it had to deal with, with minimum disruption to all stakeholders.
- The industry was able to convince government to change the regulations to have a size limit included.

SE: NSW looks to be going down the same path.
P: When quotas and demand are the same, you have to deal with different scenarios.

- Government needs to be flexible in its approach, the 2 scenarios are, high quota that demand cannot take and lower quota where demand outstrips supply. These need to be dealt with differently. The industry cannot be allowed to grow beyond the long-term sustainability of the resource.

SE: Does it matter which way it goes?
P: Once built, infrastructure needs to maintain a certain level of supply to support the capital invested. This is hard when the supply is variable.

- If in the good years infrastructure is built to accommodate a certain level of input, then in the bad years the industry can suffer greatly.
- Industry needs to be stabilised to protect it from the boom-bust nature of the kangaroo numbers. The weather being the major factor in setting quotas.
- Need to have a management programme that can be responsive to the environmental concerns as well as provide the framework in which allows the industry to remain economically stable.
- The government needs to behave in a certain way as the resource is already limited by a series of decisions and weather conditions.(8 – 10 year cycle periods)
- It behoves the government to understand what impact it has on industry because they set the quota, so therefore it is not a free market.
- As the industry matures, there needs to be some recognition as to the size it can grow in relation to the sustainable resource it relies on.

SE: What about stability from multi-species?
P: It is the only industry to take field shot animals therefore the meatworks are not set up to take live animals.

- Wild pigs are the only other game animal taken with k/roos.

SE: What was your perception of the skin-only harvest decline?
P: The realisation of a resource not being used and the opening up of the human consumption market in conjunction with the established pet food market growth has led to more carcasses being taken for meat leading to a decline in skin only.

- Greater value added achieved from total resource utilisation.
- QLD was traditionally predominantly a skin-only harvest, but as the infrastructure and geography of the kangaroo harvest has grown, it has now moved to the other end of the spectrum; that is, promoting the full use of the carcass. This also helps by removing food for feral animals.

SE: Do you still buy skin-only pelts?
P: Still buy a few skins from skin-only harvesters, less than 5% of purchases.
- A few years ago, we made a conscious decision to access material from meatworks.
- We could see the change coming from the growth in the two meat markets therefore restricting the availability on skins due to more return from carcasses.

SE: Have you noticed a change in quality?
P: As the meat has to be handled in a certain way, the skin quality has improved.
- If issues are experienced they are more likely to be understood by fewer similar minded people who are also running a plant.
- There were environmental problems, especially from the discharge from salted skins which is no longer an issue with fresh skins from the processors.
- At times we have suffered from poor curing practices which leads to damages/ loss and lower quality product from the skin only supply.

SE: If the Skin-only harvest were permissible again in NSW would there be a market?
P: If the market demand is high, you can always find a buyer.
- The question is what are you doing to the processing industry? Is it going to be a short-term gain for a long-term loss?
- It depends on the fact that the demand for skins has to be strong while the market for meat is weak otherwise it may not be viable if carcass prices are high.
- If there was a mechanism in place to help landholders deal with problems (eg exceptional circumstances) to allow a skin-only harvest, the industry infrastructure may not be able to be developed because of the patchy nature of such an arrangement.
- Need to look for the best outcome for the community and industry, which is stability in the long term.
- You could switch it on or off opportunistically if the meat market was oversupplied, however it is unlikely in the years that the meat market was oversupplied that there would be EC declarations. Market conditions and weather patterns are not always in sync.
- Where is the value in the greater sense?:
  1. industry core is strong and is built on capital investment
  2. the rules are thrown out to suit particular circumstances
- There is enough pressure from the animal rights lobby exerted on government to ensure:
  - Scientific system
  - Good quota system
  - Good management program
  - Sustainable resource
- The industry also removes some pressure from grazing lands

SH: Do you see any possible reason why the skin-only harvest will reverse its current trend?
P: No. The value added from the utilisation of the total carcass will mean it is unlikely for it to be economical using skin only in the future. Once infrastructure is built and market demand is supplied we see no reverse to the current trend.
**General comments at the end:**

- The industry can’t afford to over-exploit the resource.
- It can’t afford to over capitalise infrastructure in above average quota years. Need to use a long term average as a benchmark.
- Technology is allowing meat and skins to be utilised rather than just skins, (ie mobile chiller boxes).
- In terms of resource management size restrictions have a part to play in the sustainability of the resource.
- In terms of the skin market, when prices are too high it encourages manufacturers to use other materials. It can take a couple of years for the kangaroo leather to break back into these markets.
Phone interview with Andrew Lewis from QPWS, QLD;

3.00 pm EST, 22nd November 2005.

Present: Sally Egan, Andrew Lewis and Steffan Holmes

Sally Egan (SE): What is the impact on compliance from skin-only shooting?

Andrew Lewis (AL): Compliance is more difficult with skin only for a number of reasons:

- Low window for detection due to storage potential, not so with carcass.
- Store them up out of sight and get rid of them quickly.
- Lower investment, all that is needed is a cheap vehicle (no load capacity or accredited rack needed) and a set of chains. This allows the not-so-professional element in.
- Illegal shooting and leaving skinned bodies near rural roads is really bad for the industry as it creates a strong and lasting visual presence that most people find abhorrent. This leads to lots of complaints and negative perceptions.
- The storage potential of skins allows market trade of illegally tagged (out of date) skins interstate.
- Easy to mix untaged skins in with tagged when dealing in lots of a thousand, etc.
- Transport trucks are easy to miss, can be any old truck.
- Individuals able to take higher numbers
- Full carcass harvesting vehicles are a lot less mobile (easier for landholders/authorities to catch) and harder to unload than skin only vehicles.
- As a result of all this skin shooters can stay below the compliance radar a lot easier.
- Lower investment provides the ability to respond rapidly to market forces – a lot of illegality happening in short time frames.
- Skin shooters tend to shoot smaller kangaroos, impacting on population rebound potential.
- Because they can carry a lot more skins, are more mobile and don’t have to travel to unload than skin only vehicles.
- There is a lack of self regulation regarding animal welfare, they can slip body shot, etc kangaroo’s through easily as the animal skins are graded a lot later in the process – eg 1000 body shot skins may well be unwillingly accepted as the animals are already dead, but it is doubtful that the same shooter would get the first 10 body shots through as carcasses so body shooting would be pulled-up at this point.
- Skin identification can be difficult – city dealers, who are often the only other person to see the skins prior to export, don’t have to worry that anyone can or will identify the animals, eg Whiptail Wallabies skins exported as Eastern Greys. With so few people seeing what is happening it is unlikely that reports of illegality will be lodged with Authorities. [most carcasses are probably seen by 8-10 people to the point of processing]
- There is a problem with the issue of stockpiling skins, shooting illegally outside the quota and hiding the skins and the following year, tagging them and selling them.
- “Underhand dealing” was also common where the shot roos never get put in a shooter or dealer return and hence were not deducted off the quota.

Quota implications of skin only shooting:

- Rapid response to markets, they can pick up the harvest rate really quickly and inexperienced management don’t even realize what is happening.
- High volume; a HC carcass shooter might shoot 35 good bucks in a night, while the same shooter skinning might do 100.
- Not monitoring the quota on tags = can over run. Its too late once they are shot, the quota is closed but nobody wants them.[usually sold underhand]
- There are some benefits in holding the line and having no skin only, as the perception of communities is that it is illegal and therefore unlawful skinning is more likely to be reported.
• One suggestion to reduce problems if skin only shooting was re-introduced would be to keep the minimum skin size up and enforce the head shot.

SE:  *What do you think happened in 1996 to reduce the levels of skin shooting?*
AL:
• After 1996 the market for skins dropped
• Head shooting came in.
• Size limitations came in, they went from 4 sq feet to 5.

SH:  *Is there any extra administrative burden from skin only shooters?*
AL:  No, not really.

SE:  *Why do you think the rate of skin only shooting is falling?*
AL:  Mainly price, the price of meat/skin combo is good, while the price of skin went down by comparison.
• Tanneries buy the skin from meat processors and they are generally a better skin.
• Technology is getting better and more affordable, i.e. mobile and personal chillers.
• More dealer sites, from 120 to over 240 currently servicing the regions.
• There are more options for the carcass now with the human consumption market.
• Shooters are taking pride in their business – more professional.
• Bone chewing by cattle, landholders don’t like carcasses left in the field.
• Shooters used to shoot kangaroos for the skins and leave the carcasses to attract pigs and shoot them as well, they started setting up with mobile chillers for the pigs – now they carcass both roos and pigs most skins now come from skinning underweight carcasses.
• Salt is another issue, environmental problems with effluent, local governments are getting stricter about salting skins in town and levels from processing plants.

SE:  *what are some of the positives of skin only shooting?*
AL:  They don’t think there is a tendency to think in terms of using skins to fill the gaps in their loads, mainly skins come from small kangaroos or body shot animals.
• It can be good in isolated areas, or for people who live on properties, fewer headaches and they don’t have to go into town all the time to unload.
• If a property owner shoots some kangaroos for dog meat, then they can keep the skins and sell them commercially.
• Low fuel costs if you are living on the station, and low equipment costs.
• Higher volumes of smaller kangaroos can be taken [this often pleases a landholder]
• The presence of skinned bodies also tends to appease some landholders who might otherwise go down the Damage Mitigation Permit line
• Medium skins - a doe with large pouch young will usually make a medium skin size but may not make carcass weight.
• In wet weather you can still be shooting, even if you can’t transport them to town.
• Skin shooting is a good additional income option for rural workers living on stations. Shooting 5 or 6 skins after work each day and a few more on the weekend often results in a better income at the end of the week than is achieved by the “day job”.
Phone interview with NSW Compliance Officer Peter Morris;

10.30 am EDST, 5th December 2005.

Present: Sally Egan, Peter Morris and Steffan Holmes

Sally Egan (SE): What’s your opinion of re-introducing skin only harvest?
Peter Morris (PM): I was around during the time when skin-only shooting in NSW was allowed and can remember that there are compliance issues with skin-only shooting including:

- Storage – skins can be stored anywhere for any time, once salted, which makes compliance difficult. You can find them anywhere untagged
- Sub-contractors – The licensed trapper gets his mates to go out and shoot and skin the kangaroos, these can be stored anywhere, then the trapper tags them up and sells them.
- The skins can be stashed untagged making ownership ID very difficult
- Often the skins are tagged just before they are sold.
- Makes inspections much more difficult
- Harder to inspect skins for body shots than it is with carcasses.

Peter commented that in NSW there is a weight limit, and he travels round with a set of scales in his car, but size limits are hard to equate with weights.

Steffan Holmes (SH): How many kangaroo compliance officers are there?
PM: There are two full time kangaroo compliance officers, but other NPWS rangers do some compliance work as well, its just a small part of their jobs.

SE: What do you think will be the impact if skin-only is re-introduced?
PM: There may be an initial flurry of activity but it will die down.

- Some graziers in western NSW would be pleased.
- In the past there were conditions put on skin-only shooting, e.g. a property can only skin only shoot if its over 100km away from a chiller, this became very hard to manage.

SE: Why do you think the primary producers want it?
PM: in the past the practice was to shoot the occasional roo that they saw while driving around the farm and skin it, after a while the number of skins would build up to a point where they could sell them and make a bit of extra money. It doesn’t cost them any thing to do this.

- The Tilpa Rangecare Group was allowed to do skin only shooting as a one off arrangement, but nothing happened.
- There might be a few individuals who want to get back into it that are driving it.
- Processing industry is against it.
Phone interview with the CEO of a skin processor company in NSW; 

10.30 am EDST, 23rd November 2005.

Present: Sally Egan, CEO of Skin Processing Company* and Steffan Holmes

*it should be noted that the CEO did not wish for the company or the CEO’s name to be known.

Sally Egan (SE): What’s your opinion of re-introducing skin only harvest?
CEO: see the re-introduction of skin only as a negative. The viability of the industry needs stability.

SE: Do you normally buy your skins ex-processor?
CEO: Yes.

SE: Have you bought skins from QLD?
CEO: Rarely, but it does happen sometimes, and if it does happens we buy from meat processors.
   • The geography is limiting – the on-costs are too expensive
   • Little volume and the quality is quite different.

Steffan Holmes (SH): Why is the re-introduction of skin only a negative?
CEO: From an industry point of view maximum utilization is a goal as this help ensure the economic viability of the industry.
   • Due to limited quotas and the fact that NSW is often very close to fulfilling the quota, the industry needs to maximize the yield.
   • If the quota was to increase to allow the extra animals from the skin-only harvest it might be a different story.
   • Skin only is a transient, opportunistic industry that does little for the long term viability and stability of the industry.

SE: explains that pastoralists in remote locations are interested in this option to allow them to fill their zonal quotas while earning some extra farm income.
CEO: proposes that it might be a better idea to increase/provide infrastructure in those areas to allow farmers to harvest both meat and skin.

SE: if the skin-only was re-introduced would there be a market for it?
CEO: If there was a supply shortage and the demand is high there would probably be a market.

General discussion:
   • However during these conditions it is not likely to be an excess in the quota, making meat and skin shooting more economical profitable.
   • If there is a surplus of skins, there won’t be a big demand.
   • Two years ago there was a surfeit of animals that resulted in huge piles of skin in stockpile
   • Another consideration is the global economic scene, and while the Australian $ is at .80/$US, export is always going to be tough.

SE: Can the skins be processed cheaper off-shore?
CEO: Certain items of leather can be more cheaply processed offshore, but kangaroo leather is in a niche market.
   • There is variation in kangaroo leather quality; as a result, processing of top end products in Australia is competitive, while the lower end can’t.
   • Tanneries in Australia should remain competitive.

SH: One of the other leather processors has mentioned that since the increase in meat market and the subsequent increase in handling standards and professionalism by the industry, the quality
has improved in QLD. Have you noticed a change in quality in the skins since 1996 and the phasing out of skin-only?

CEO: Yes the quality has increased, probably not only just through increased professionalism and handling procedures, but with fresh green skins.

- Skin processors much prefer green skins as the variables of undeterminable skin ages (skins stored over long periods before being brought to the processors), improper salting techniques and bacterial diseases are largely bypassed with fresh green skins from the meat processors.
- Most problems with the skins are only picked up during the tanning stage, a long time after the trapper has been paid.

Final comments?
CEO: stability needs to be in the industry to help secure its future.
Appendix B. Submissions received from stakeholders.
8 December 2005

Nicole Payne
Manager, Kangaroo Management Program
Environment Protection & Regulation Division
Department of Environment and Conservation
PO Box 2111
DUBBO NSW 2830

By email: nicole.payne@environment.nsw.gov.au

Dear Nicole

Thank you for the invitation to provide NSW Farmers’ Association’s policy on the subject of ‘skin only shooting’. The Association understands that this information will be used in a consultants report on this matter for the Kangaroo Management Review. Please find below comments outlining NSW Farmers’ Association’s views on the issue of ‘skin only shooting’.

**NSW Farmers Association Policy – Skin Only Shooting**

“That the WDC support and pursue the issue of skin only shooting bearing in mind that it represents an alternative income for regional Australia with the added benefit of limiting total grazing pressure.”

The NSW Farmers Association policy takes into account three key principles which they believe require consideration when reviewing proposals for the Kangaroo Management Program (KMP). These are:

- Ecological Sustainability
- Grazing Management/Pest Mitigation
- Commercial Viability

**Ecologically Sustainable**

The primary goals of the NSW KMP and the associated Harvesting Licensing program are to ensure that the taking of kangaroos is ecologically sustainable and maintains biological diversity.

NSW Farmers Association believes that ‘skin only shooting’ undertaken under license upholds the principles of ecological sustainability as it will have no greater impact on species’ populations than the ‘drop tag’ system.

**Grazing Management/Pest Mitigation**

There are conflicting objectives in management of the Kangaroo numbers and distribution between the interested parties. There is conflict between the issues of conservation management, pest mitigation/grazing management and kangaroo product marketing. This also produces conflict between various participants in the kangaroo product supply chain.
from land holder, shooter/harvester, Fauna Dealer Wholesalers and the domestic and export marketers for Kangaroo products.

Sustainable resource management and commercial utilisation of the Kangaroo population are seen by land holders as an essential component of the pastoral rangelands activities but clearly Kangaroos are pests when populations rapidly increase or are uncontrolled.

To effectively manage their properties land holders must control grazing pressure and the harvesting of Kangaroos is a key component of any grazing management plan. Essential to this is the licensing of trappers and fauna dealer wholesalers without whom any kangaroos harvested in a pest mitigation context would simply be left in the paddock. There are however many situations where non-commercial culling of kangaroos is required. In most instances, this non-commercial culling is carried out by landholders due to:

- commercial harvesters being unavailable, due to low economic returns, and
- specific conditions existing that require urgent culling (e.g. newly established crops requiring protection).

In these circumstances, the cost to the landholder of culling kangaroos is quite high and there is no opportunity under present arrangements to recoup these costs. ‘Skin only shooting’ is a process that will allow landholders to cover the costs of kangaroo culling. If the management objective is to provide pest mitigation/grazing management, then some appropriate regulation is required to allow skin only shooting. If the landholders had some incentive to either take kangaroos themselves or entice trappers, it is a better alternative to the ‘drop tag’ system and meets the objectives of several industry participants.

**Commercial Viability**

Critical to the success of the KMP is commercial viability for all participants. Landholders must be able to economically undertake pest mitigation/grazing management. Trappers must receive an appropriate income from their professional activities and FDWs must be able to operate commercially viable businesses.

It is necessary that the KMP and associated harvesting licensing provides the necessary framework for this to occur, and therefore NSW Farmers Association believes that ‘Skin only shooting’ under licence should be permitted. As ‘skin only shooting’ is designed to cater for those periods whereby commercial harvesters are unavailable the existence of these licenses will not adversely impact on their commercial enterprises.

If a system was established that could better facilitate ‘commercial take’ (e.g. through improved communication channels amongst industry which enabled more effective responses to landholders requirements for damage mitigation) then the need for ‘skin only shooting’ is diminished. However up until this point landholders require an option which permits them to minimise damage to their enterprise in an adequate, least-cost and timely manner. ‘Skin only shooting’ provides this option.

Once again I would like to thank you for NSW Farmers Association’s opportunity to provide input on this important issue. If you have any queries on the Association’s position please contact our representative on the Kangaroo Management Advisory Panel

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Rosemary Barnes.
Yours sincerely
Bill Murray
Chairman - Western Division Council
Hi Nicole,

The following comments can be considered the formal commentary from RSPCA.

In relation to skin shooting, the RSPCA considers that if the culling of an animal is deemed necessary and justified in the circumstances, the issue as to whether it is for meat or skin purposes once the animal has been humanely destroyed, is of no relevance in this regard.

Following are some policies and positions taken directly from our current national policy and position book, which may further explain the Society's views.

1.2 Control and commercial use of native animals

1.2.1 RSPCA Australia recognises that, due to a range of factors, in many areas there is an imbalance in wild populations of some species of native animals. RSPCA Australia acknowledges that in some circumstances it is necessary to reduce wild populations of some native animals.

1.2.2 RSPCA Australia is opposed to the killing of native animals in the wild where there is the potential for cruelty. Such killing should only be sanctioned where no successful humane non-lethal alternative method of control is available.

1.2.3 Any measures taken to reduce or otherwise control wild populations of native species must be proven to be necessary and potentially successful at reducing the adverse impact of the target animals. They must be conducted humanely, and be under the direct supervision of the appropriate government authorities as part of an approved management program.

1.2.4 Such control programs should be target-specific, not cause suffering to nontarget animals, and should be effectively monitored and audited with resulting data made available for public information.

1.2.5 RSPCA Australia opposes the commercial removal and use of native animals, unless such use is carried out in a humane manner and only as part of a fully regulated and government supervised management program.

See also—G2.1 Humane killing

Thank you for the opportunity in responding.

Yours sincerely,

Steve Coleman
Good afternoon Nicole and Sandra.

This email is for passing on to Consultant Sally Egan.

Our recommendation about if to allow or disallow skin only shooting is to say that National Parks and Wildlife Service / Department of Environment and Conservation, in order to manage Kangaroo numbers efficiently must always be in a position to be flexible according to the conditions of the time.

Right now for instance and most likely for some years to come due to recent years of drought throughout the State, Industries demands for Kangaroo meat will require the available quota and hence full utilisation of the Kangaroo should be a priority and any skin only shooting should not be permitted.

At some time in future years however it could well be as the population recovers that full utilisation of the Kangaroo may not be enough to control numbers, and if that was to be the case and animal welfare issues can be covered, then National Parks and Wildlife Service / Department of Environment and Conservation should be flexible enough in their management guidelines to permit controlled skin only shooting.

Thank you for the opportunity to comment.

All the best.

Michael Mulligan
Australian Game Meat Producers Association.
Dear Nicole,

Ecological and economic sustainability of the rangelands encompasses all native flora and fauna as well as commercial enterprises. It has been recognised for many years that for the NSW Kangaroo Management Plan to work effectively, in terms of conserving natural resources by controlling kangaroo numbers, it is important that the cull achieved closely mirrors the allocated quota both in total and across each zone.

PAWD recognises that the focus of the KMP should always be for full utilisation of the resource and when ever possible this should be skin and meat; however some situations require the use of other management tools. Commercial skin shooting should be reintroduced as one such tool to be used by landholders only when full utilisation is not possible.

Learning from past population and harvest information skin only shooting should not be rejected on the premise that the quota will be taken in any one year. The kangaroo population has been known to increase dramatically to unsustainable levels and the demand for the carcass has not always kept pace, which has led to the quota most often not being taken.

True competition with new processors may lift harvest rates and price, and inturn alleviate the need for skin only shooting. If the quota is not taken this means the demand for carcass is not great enough to support the commercial take.

If kangaroo numbers are still a problem then the only alternative is shoot and let lie, this alternative is becoming an extremely costly exercise for the landholder so it would seem prudent to let the landholder shoot for skins and recoup some of his expenses incurred in an effort to reduce total grazing pressure. The fact that the non-commercial tags are not being utilised by the landholder is more a reflection of the high cost of kangaroo control and high demands on his time, rather than that kangaroos are not in large numbers.
Management strategies employed by landholders to reduce utilisation of carcasses by vermin would include:

- Utilisation of carcasses to feed working dogs or pets.
- Strategic baiting of foxes utilising unused carcasses, in collaboration with the NPWS and RLPB. This is usually carried out during the foxes breeding season and during lambing.
- Utilisation of carcasses for the trapping of feral pigs, which are feral animals needing eradication.
- Pitting of carcasses.
- Burning of carcasses.

Landholders have learned from passed experiences that baiting of foxes is pointless if kangaroo carcasses are not disposed of correctly.

The Western Division Lease Holders Alliance proposal outlines the model for the effective management of the species detailing guidelines for all management zones, animal welfare concerns and occupier/trapper obligations. To give security and a base for planning to participants in the program the following points could be used in the formula to guarantee the supply of carcasses and the suitable use of skin shooting.

The initial quota for carcass use for the twelve month period be the average of carcasses utilised over the previous two years plus 5% for growth.

After deducting the estimated carcass harvest from the allocated harvest quota the balance to be allocated, to be shot for skins.

A proportional view of both carcass and skin cull should be taken after the first six month period and then two monthly or as required.

If necessary, adjustment to the carcass harvest will be made at the time of the proportional period review of the actual and estimated harvest.

The skin harvest adjustment, to allow for carcass availability or lack of carcass demand, to be made by the non-issue of skin shooting endorsements for the necessary period or notification to the industry of an adjusted increase in allocation of skins.

Any adjustment to be proportional to population and based on state-wide results.

This will allow equity of participants and be cost effective while maintaining competition and allowing good management practices when related to total grazing pressure.

In summary, advantages of the skin only proposal
1. Enables landholders to effectively manage their land resource as carcass demand is not adequate and limits management of the species.
2. Allows the quota to be filled in areas where it is difficult to take the required carcass numbers due to inaccessibility.
3. Allows the occupier and / or contracted trappers to revert to skin shooting when their carcass take is limited, which in turn increases their viability.
4. Would achieve servicing of all zones across the state.
5. Allows greater security for National Parks and Wildlife Service in the management of the program.

Thanking you for the opportunity to put forward the Association’s policy regarding skin only shooting.

Yours faithfully.

S F Bright
Senior Vice President.
Pastoralists’ Association of West Darling
Ms Nichole Payne
Manager, Kangaroo Management Program
Department of Environment and Conservation
PO Box 211
DUBBO NSW 2830

Dear Nicole,

Re: NSW Department of Primary Industries position on taking of kangaroos for Skins Only.

NSW Department of Primary Industries does not support the permanent banning of shooting of kangaroos for skins only. If the meat processing industry is unable to take close to the full quota each year skin only shooting should be available to allow the quota to be taken.

It is recognised that industry codes of practice need to be complied with in regard to humane killing of kangaroos for skins only.

Geoff Woods
Regional Director DPI Relations (Far West)
29 December 2005

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