

CHAPTER 5

CURRENT KANGAROO MANAGEMENT

Introduction

5.1 An outline of each of the kangaroo management programmes (KMP) is set out below. Particular aspects of the programmes are dealt with in more detail. The programmes are published by the ANPWS.

Queensland

5.2 In Queensland, the conservation and killing of kangaroos is controlled under the Fauna Conservation Act 1974. Section 29(i) of the Act states:

Upon being satisfied at any time that a particular species of protected fauna is present in a district in numbers in excess of sufficient numbers to ensure its satisfactory survival, the Governor in Council may from time to time by Order in Council declare with reference to that district an open season in respect of that species of protected fauna for such period as he thinks fit.

In 1986, open seasons were declared for red kangaroos, eastern grey kangaroos, western grey kangaroos and whiptail wallabies in specific Fauna Districts of Queensland.

5.3 A permit is required by a person who wishes to kill open season species of kangaroo for commercial or other purposes. A shooter must declare the areas in which he intends to work and

have the written permission of the relevant landholders. Shooters must submit monthly to the Queensland NPWS details of the kangaroos they shot for commercial purposes.

5.4 Fauna dealers have to be licensed and their premises registered, both by site and purpose (skins, carcasses or both). They, too, have to provide monthly details of all consignments handled at each premise. No more than 150 dealers may be licensed at one time and restrictions may be placed on the number operating in any local government area at one time.

5.5 Shooters are issued with self-locking, numbered plastic tags which must be affixed to each carcass or skin. Tags are non-transferable, non-refundable and may only be used in the year of issue. Dealers are prohibited from accepting skins or carcasses which do not have tags affixed. Shooters must have made arrangements with a fauna dealer to accept kangaroo carcasses before they shoot the animals.

5.6 Once the annual quota is approved by the responsible Federal Minister, the total quota is divided among the dealers in accordance with a formula based on dealings over the previous three years and the current location and use of buying sites. Initially, each dealer is allocated part of his or her annual quota and the balance is issued after July provided that the composition of the kill handled by the dealer meets certain criteria which reflect sound management of kangaroos in that area. These criteria are set out in the KMP.

5.7 The Queensland NPWS issues more tags than the number of kangaroos provided for in the quota. It defends this practice by arguing that the point of control is at the dealer and dealers who exceed their quotas are liable to have the balance of their quotas withheld or their licences suspended or cancelled.

New South Wales

5.8 Under the National Parks and Wildlife Act 1974, kangaroos are protected except where a licence has been issued to a landholder under section 121 by the NSW NPWS. According to the KMP for 1987, only red kangaroos and eastern and western grey kangaroos may be killed. The KMP states:

The process of licence issue begins with a landholder approaching the Service about the number of kangaroos on his/her property and the damage these kangaroos are causing or may cause. This application is submitted to the appropriate District Office of the National Parks and Wildlife Service (the Service). It must indicate the type and seriousness of the damage caused or anticipated, the species involved, the estimated number of that species present, and the number proposed to be killed.

An authorised Service Officer must then consider whether to issue a licence or not and, if yes, the number of each species allowed to be killed under that licence. The licence is issued under s.121 and is called an Occupier's Licence. This licence will state the number of further conditions the Service Officer considers warranted. The Occupier's Licence is specific to a property and is not transferable. A batch of serially numbered cloth tags must be issued with the Occupier's Licence. The serial numbers of these tags are recorded against the licence in the District Office records. The total number issued with the licence must correspond exactly with the number of kangaroos allowed to be killed under the licence.¹

5.9 Once a landholder has permission to kill a number of kangaroos, he decides whether to shoot them himself or to use an agent, in which case the carcasses do not enter the commercial trade, unless the landholder holds a trapper's (professional shooter's) licence, or he arranges for a trapper to take them. A trapper who is licensed under section 123 of the Act may take kangaroos for commercial purposes.

5.10 If the landholder or his agent shoots the kangaroos, he has to affix a cloth tag to the carcass of each animal. A professional shooter affixes to the carcass both the cloth tag and a serially numbered plastic royalty tag, for which he has to pay a royalty, currently 50 cents a tag, to the NSW NPWS.

The Licensed Trapper then delivers the carcass to a chiller. This is controlled by a Fauna Dealer (Wholesaler) who must be licensed under s.124. All premises where kangaroo carcasses are held by a Fauna Dealer (Wholesaler) must be registered in accordance with the Regulations. The location of the chiller is specified in the registration. Records of carcass numbers, skin numbers, species, weights, dates and the Licensed Trapper delivering them, are maintained by the Fauna Dealer (Wholesaler) for each chiller. These records must be lodged with the relevant Service District Office within 10 days of the end of each month.

... The Fauna Dealer (Wholesaler) then transfers the carcass to a boning-out works where the skin is removed and the meat is prepared for subsequent sale. The boning-out works must be registered as for a chiller, and similar records are required to be kept and lodged with the Service District Office. The tags stay with the skin, which is usually sent to a tannery for initial treatment (pickling) or full tanning. The tags are removed at this point. The tannery must be licensed (Skin Dealer's Licence; s.125), as must any Skin Dealer operating in this chain. Skin Dealers must also keep records and lodge returns.

The meat eventually winds up with a retailer. Retailers operating in N.S.W. must also be licensed (s.124).

... Where the Service permits shooting for skins only, the Licensed Trapper must still comply with the records requirements. He may only sell the skins to a Fauna Dealer (Wholesaler) or to an interstate dealer.²

Western Australia

5.11 Kangaroo management in Western Australia is administered by the Department of Conservation and Land Management. Under the Wildlife Conservation Act 1950, kangaroos are protected except where the Minister responsible for the Act declares otherwise.

Four species may be taken for the purpose of containing their effects on other land management practices (i.e. for the purpose of damage mitigation), by virtue of the provisions of Section 14(2)(a) (open seasons) or Section 15(1) and Regulation (5) (damage licences) of the State's Wildlife Conservation Act and Regulations.³

5.12 The product derived from three species - red kangaroos, western grey kangaroos and the euro - may be exported but the products from a fourth species, the agile wallaby, although subject to commercial use, may not be exported. Consequently, the agile wallaby is not included in the KMP for Western Australia.

5.13 The Department told the Committee that:

In large numbers, the agile wallaby was exploited in the 1920s. In recent times our Department has permitted commercial carcass exploitation of agile wallabies in the order of 10 000 or 20 000 in a couple of years.⁴

5.14 Professional shooters are licensed by the Department to shoot kangaroos on specific properties. A shooter operating in the pastoral areas is issued with a licence from the Department in Perth, after a report from the district wildlife officer has been considered. A shooter operating in the agricultural areas in the south-west of the State may be licensed by the district wildlife officer or the Perth office of the Department. The shooter must have an appropriate firearms licence and the written permission of the landholders on whose properties he intends to

shoot. A shooter is asked on his application form for details of the calibre of the rifles that he owns. A licence is not issued to a shooter without an appropriate rifle. There is no test of his marksmanship.

5.15 In March 1986, there were 88 shooters licensed to shoot red kangaroos in pastoral areas and 34 to shoot grey kangaroos in agricultural areas.⁵ The number of licences issued in the pastoral areas is fairly static and there is an upper limit. There is no limit placed on the number of licences issued in the agricultural areas but it seemed from the evidence that no great fluctuation occurs.

5.16 Shooters are issued with numbered royalty tags for which they pay 20 cents each to the Department. A tag must be attached to each carcass if the shooter intends to sell it to a dealer. There are three different coloured tags; one for each species, that is, the red and grey kangaroos and the euro. Although tags are generally issued to shooters, the landholder has ultimate responsibility for them.

5.17 Tags issued in one year may be used in the next year but the kangaroos killed in the second year are included in the quota for that year and not the preceding one. Each shooter is required to forward to the Department regular returns containing details of kangaroos shot and tags used.

South Australia

5.18 All kangaroos are protected in South Australia except as provided for under section 53(d) of the National Parks and Wildlife Act 1972. Under that section, kangaroos may be taken for, among other things, 'the destruction of animals that are causing damage or likely to cause damage to the environment or to crops, stock and other property'.^{5A}

5.19 Three species of kangaroo are covered in the KMP for South Australia - red kangaroo, western grey kangaroo and euro.

5.20 The State is divided into two areas for management purposes - the 'Commercial Utilization Area' (CUA) and the 'Restricted Area'. Within these two areas, there are 4.5 million hectares devoted to national parks which are managed in a separate way.

Commercial Utilization Area

5.21 The CUA covers an area of 282 300 square kilometres and is divided into ten Kangaroo Management Zones (KMZ), which are based on biophysical characteristics. Each zone is an 'independent management unit within which kangaroo populations are monitored' and management strategies are worked out annually. The commercial quota submitted to the Commonwealth is the sum of the quotas calculated for each of the ten Zones. These are based on previous trends in population density obtained from shooters' records, expected climatic conditions and the results of annual aerial surveys.

5.22 Management strategies adopted by the SA NPWS are based on the following criteria:

A. In KMZs where the "average density" of a species of kangaroo is less than one per square kilometre there will be no release of quota unless the zone is listed in B.

B. In KMZs where the distribution of the kangaroos' habitat is disjunct and concentrations of animals do occur under low average densities. Commercial quota can be released if these concentrations of kangaroos are at a density to cause deleterious effects to the accepted land-use.

C. In KMZs where the average density of kangaroos is greater than one per square kilometre but less than a "warning density" commercial quota is released at the Ranger-in-Charge's discretion.

D. In KMZs where the average density is greater than the warning density, commercial quota is released via a general issue of permits to the owners of properties who apply (for) them. This release is not dependent upon a property inspection, until the total quota released within a KMZ reaches 90% of that quota allocated to that zone for the calendar year.

(1. AVERAGE DENSITY: The density of kangaroos by species over a Kangaroo Management Zone as determined by the annual aerial survey, or in exceptional circumstances, by widespread surveys (either aerial or ground) within the KMZ.

2. WARNING DENSITY: A mutually agreed upon density above which the population of kangaroos are perceived to have a widespread and deleterious effect upon the accepted land-use. This density does not pretend to relate to ecological carrying capacity or guaranteed maximum or minimum stocking rates. It is a density determined solely on social value judgements arrived at by discussion between groups with varying interests related to kangaroo management.)⁶

5.23 A permit, specific to a property, is required under section 53 of the Act to kill kangaroos for damage mitigation purposes. If kangaroos killed under that permit are used commercially, a self-locking plastic tag must be attached either to the carcass or the skin 'in the approved manner'. No tags are required if the kangaroos do not leave the property.

5.24 If kangaroos which are killed on a property are to be used commercially, the property owner, when applying for a permit, must nominate a registered processing firm to which those kangaroos will be sent. Only one firm may be nominated to take kangaroos from any particular property.

5.25 Property owners are required to submit a return to the SA NPWS within 14 days of expiry of the permit.

5.26 Shooters may be licensed to shoot either on a particular property or to shoot in any part of the State for which a commercial permit is valid. They receive the tags from the processor and furnish quarterly returns to the SA NPWS.

5.27 Processors are issued with permits 'to Keep and Sell Protected Animals (Carcasses and Skins)'.⁷ They also have to satisfy the South Australian Central Board of Health 'as to their work's cleanliness and suitability'.

5.28 A permit may be issued for the import of kangaroo meat or carcasses into the State, provided that prescribed conditions are met.

This permit will not be issued until the applicant has established that the kangaroo products were obtained from kangaroos acquired from a legal source. Imp(or)t permits will be valid for multiple shipments of up to declared maximum amount for a maximum of period of three months. The import(e)r is required to advise the National Parks and Wildlife Service at least 48 hours before a consignment enters South Australia, and to provide monthly summaries of the amount of products imported.

Kangaroo meat imported into South Australia in appropriately labelled packages of 2kg or less with the total consignments less than 100kg per month will be considered a processed article and will not require an import permit. Kangaroo meat imported in packages greater than 2kg weight or where the total consignments exceed 100kg per month will require an import permit.

Kangaroo meat or carcasses imported for use as pets meat must also be accompanied by a certificate stating source of origin and destination. A duplicate copy must be lodged with the Meat Hygiene Authority, Department of Agriculture. Kangaroo meat or carcasses

imported for human consumptive use must also comply with standards dictated by the South Australian Health Commission.⁸

5.29 Processed kangaroo meat in packages weighing two kilograms or less within a total consignment of less than 100 kilograms may be imported without a permit provided that health regulations are observed. The import of larger packages or consignments needs a permit which 'will not be issued until the applicant has established that the meat is being obtained from an approved source where the kangaroos are taken under a conservation programme and where the processing works, chillers and other facilities have been approved by an acceptable Health Authority'.

5.30 A permit will be granted for the export of kangaroo meat or carcasses to another State provided that the kangaroos have been legally acquired. An import permit may be needed from the State to which the consignment is being sent.

Restricted Area

5.31 The restricted area is located mostly north of the CUA in the dominantly cattle grazing area and south of the CUA in the cropping-improved pasture area.

5.32 A property owner may apply to the SA NPWS for a permit to kill kangaroos which are causing damage to his property. A permit may be issued for 12 months but all permits expire on 31 December. A return must be submitted by the property owner within 14 days of the expiry of the permit. A property owner may purchase up to ten tags a year to allow for the personal use of ten carcasses. All other carcasses must be left on the property.

Tasmania

5.33 Five species of kangaroo are found in Tasmania, three of which - the eastern grey kangaroo (known locally as the 'forester'), the Bennetts wallaby and the rufous wallaby - are subject to killing to contain their deleterious effects on properties. The Tasmanian NPWS oversees the management of kangaroos under the National Parks and Wildlife Act 1970.

5.34 Few eastern grey kangaroos are killed each year under special permits to mitigate damage to agricultural crops. Products derived from them may not be exported and, therefore, they are not covered by the KMP approved by the Federal Government.

5.35 Unlike the other four States where most kangaroos shot in accordance with the respective KMP are used in the commercial trade, a minority of Bennetts and rufous wallabies have been used commercially. A local market for kangaroo meat for pet food has developed in recent years. The skins are, however, a more important commodity and most of these have been exported. Since the beginning of 1987, exports of skins have not been permitted because a KMP for Tasmania has not been approved by the Federal Government.

5.36 An open season is gazetted for ten months each year from 1 April to the end of February in the following year. On Flinders Island, the open season is extended to all of the year. The length of the season can be varied or it can even be closed.

5.37 A person who wishes to shoot wallabies and sell the carcasses or skins must obtain a commercial wallaby hunter's licence. The licence is valid during the open season on both Crown and private land. The holder of a commercial licence must shoot wallabies in daylight hours, except where the licence holder is operating under a crop protection permit. He may then

shoot them from a vehicle at night using a spotlight. There is no restriction on the age, sex or reproductive condition of wallabies which are subject to killing.

5.38 Details of the sale of kangaroo meat and skins must be recorded on the hunter's licence and the licence returned to the Tasmanian NPWS within 14 days of the end of the open season. All sales of meat or skins must be made to licensed fauna dealers. The fauna dealer is required to make monthly returns to the NPWS.

Each skin traded must be stamped by a Service officer and a royalty paid. Royalties must be paid within 14 days of the closure of the season. No unstamped skins are permitted to be exported from the state.⁹

5.39 The Tasmanian NPWS has three sources of information from which to compile estimates of the numbers of Bennetts and rufous wallabies commercially killed: royalty payments, hunters' returns and questionnaire responses. There is no distinction made between royalty payments for Bennetts and rufous wallabies.

Since 1972/73 the number of royalty payments made annually has fluctuated markedly in response to economic factors, in particular, the market for skins.¹⁰

With regard to licence returns, the small percentage returned 'makes these estimates of little value'.¹¹

5.40 The Tasmanian NPWS resorted to a questionnaire in 1983 to get more reliable statistics of the number of wallabies shot. In 1984-85, the NPWS succeeded in getting a 75 per cent return from the questionnaires sent by post to 240 of the 304 licencees.¹²

5.41 Table 5.1 shows details of commercial wallaby harvest statistics 1981-82 to 1984-85.

Table 5.1 Tasmanian Commercial Wallaby Harvest Statistics
1972-1985

Open Season	Licences Sold	Royalties Paid	Wallabies Killed*	
			Bennett's	Rufous
1972-73	210	34 247	-	-
1973-74	142	29 442	-	-
1974-75	144	7 620	-	-
1975-76	153	6 601	-	-
1976-77	181	21 426	-	-
1977-78	224	45 471	-	-
1978-79	563	100 803	-	-
1979-80	1216	244 918	-	-
1980-81	2024	220 226	-	-
1981-82	1008	36 259	77 000	31 000
1982-83	577	24 019	49 000	28 000
1983-84	384	2 967	64 000	46 000
1984-85	304	39 931	71 000	47 000

* estimate only

Source: A modified version of a table in the Tasmanian KMP, p. 13.

5.42 Recreational hunters may obtain a non-commercial hunter's licence to shoot Bennetts and rufous wallabies in the open season. Although a majority shoot for recreational purposes over 35 per cent shoot under crop protection permits. The same restrictions apply to non-commercial licences as apply to commercial licences. However, although the carcasses or skins may not be sold, they may be used by the hunter or given away. Responses to questionnaires sent to non-commercial hunters indicate that between 50 and 60 per cent of wallabies killed were used for meat, either for human consumption or for pet meat. The skins of less than 20 per cent of wallabies killed were used.

5.43 A random sample of 200 licence holders is selected at the end of every second month to receive a questionnaire. The average rate of return is 60 per cent. The results show that non-commercial shooters kill the great majority of all wallabies taken under licence. In 1984-85, non-commercial shooters took 87 per cent of the total kill. Table 5.2 shows details of the estimated non-commercial kill from 1979-1985.

Table 5.2 Estimates of the Non-commercial Wallaby Harvest in Tasmania

<u>Season</u>	<u>1979-80</u>	<u>1980-81</u>	<u>1981-82</u>	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>
No. of licences	5 283	5 185	4 742	4 947	5 817	6 001
Estimated take:						
Bennetts						
wallaby	389 000	353 000	271 000	407 000	369 000	426 000
Rufous						
wallaby	<u>304 000</u>	<u>246 000</u>	<u>263 000</u>	<u>254 000</u>	<u>411 000</u>	<u>380 000</u>
TOTAL	693 000	599 000	534 000	661 000	780 000	806 000

Source: A modified version of a table in the Tasmanian KMP, p. 14.

5.44 Crop protection permits, which are issued without charge, specify the period, property and method of control. A landholder who has a permit which specifies shooting as the method of control may shoot the wallabies himself or arrange for a commercial or non-commercial shooter to act as his agent. Special permits may be issued during the closed season but the wallaby products may not be sold into the commercial trade.

5.45 Apart from shooting, 1080 poison may be specified as the method of control. The number of permits issued to permit the poisoning of wallabies increased fourfold between 1979-80 and 1984-85. Details of permits issued for shooting and poisoning are shown in Table 5.3.

Table 5.3 Crop Protection Permits Issued
for Control of Wallabies

SEASON	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85
Shooting	749	661	623	638	716	629
Poisoning	102	72	171	301	357	400
Total	851	733	794	939	1 073	1 029

Source: A modified version of a table in the Tasmanian KMP, p. 16.

5.46 Although wildlife regulations were changed in 1984 to prohibit snaring in the open season on wallabies, the Director of the Tasmanian NPWS may still issue special permits for snaring. The Committee was told by the Tasmanian NPWS:

As a matter of policy we have decided generally that crop protection permits will not be issued specifying snaring as a method, but that in some cases where the people who wish to carry out the snaring have been doing it for many years and are experienced at it, where the likelihood of catching non-target

animals is small, and where the farmer has some sort of investment to protect - such as a crop or an area of new pasture - they may issue a crop protection permit allowing snaring. So far we have had two applications this year.¹³

Quotas

5.47 A quota is set annually for each State, from which products derived from kangaroos killed in that State may be exported, specifying the maximum number of each species of kangaroo which may be killed and entered into the commercial kangaroo industry. It excludes kangaroos shot by landholders and not used commercially. The quota is the maximum number permitted to be killed and not a target to be reached by the industry.

5.48 Each State which permits the commercial killing of kangaroos submits a quota to the Minister for Arts, Sport, the Environment, Tourism and Territories. After it is examined by the ANPWS and the Advisory Committee on Kangaroos, it is approved by the Minister. The Minister has, on several occasions, approved a quota lower than that which was submitted by the State Government.

5.49 The quota is not part of the management programme provided for in section 10 of the Wildlife Protection (Regulation of Exports and Imports) Act 1982. Consequently, as pointed out by the Administrative Appeals Tribunal, quotas have no legal significance.¹⁴

5.50 The quota only includes kangaroos shot commercially. In Tasmania (until the end of 1986 when the last approved KMP expired), the quota was meaningless because most wallabies that were killed did not enter the commercial industry. In Queensland, hundreds of thousands of kangaroos were killed non-commercially in 1986 because the quota was reached before the end of the year. In addition, a short suspension of exports following the handing

down of the AAT decision in the case brought by Fund for Animals over the 1985 Kangaroo Management Program for Queensland exacerbated the situation. In short, the quota became a farce because the State Government allowed, as it was constitutionally able to do, the non-commercial killing of kangaroos in large numbers in excess of the quota. The only restriction on this action was that they could not be exported.

5.51 The quota has also been exceeded on a number of occasions in recent years in a number of States. Details of overshooting between 1980 and 1985 are shown in Table 5.4.

Table 5.4 Overshoot of Kangaroo Quotas 1980-85

	QLD	N.S.W.	W.A.	S.A.
<u>1980</u>				
Western grey			8 000	
<u>1984</u>				
Eastern grey	43 430			
Euro	17 595		27 000	
<u>1985</u>				
Red	47 496	23 297	1 057	
Eastern and Western grey	24 966	1 968		
Euro	2 927			43

Sources: 1980-84 ANPWS, Evidence, p. S3172, S3185 and S3818.
1985 Senate Hansard, 11 February 1986, p.93

5.52 Table 5.4 shows that in Queensland and in Western Australia the quota for one or more species has been exceeded in three of the six years. It appears that the Queensland NPWS has not exerted enough control over the system to contain the number of kangaroos taken to that stipulated in the quota. It reflects the inadequacy of both the State controls and the Federal oversight of the system by the ANPWS.

5.53 If the quota is the maximum safe limit to preserve the viability of the species of kangaroo subject to killing to contain their deleterious effects on rural industries, then that quota should include all kangaroo killing, commercial and non-commercial. The quota becomes irrelevant as a conservation tool when it is side-stepped by States which permit additional killing above the quota by landholders.

5.54 The quota has presently no legal status as it does not form part of a management programme as prescribed in section 10 of the Wildlife Protection (Regulation of Exports and Imports) Act 1982. It is inconceivable that the quota is not part of a management programme because the two are inextricably linked. How, for example, can a species of kangaroo be conserved when the management programme designed to conserve that species does not impose some limit on the killing of that species?

5.55 The Committee **RECOMMENDS** that the quota include both the commercial and non-commercial kill and that it be incorporated into the kangaroo management programme.

Commercial Kill Statistics

5.56 Details of the total commercial kill in each State from 1975 to 1984 are shown in Table 5.5.

Table 5.5 State Kangaroo and Wallaby Quotas and Provisional Commercial Kill Statistics

SIRIE	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Quota	600,000	800,000	800,000	800,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	845,000
QID Commercial Kill	496,413	605,987	574,754	596,052	1,296,979	938,252	679,051	1,136,79c	877,131	859,944
NSW Quota	205,000	300,000	365,000	365,000	645,000	645,000	694,500	843,000	843,000	500,000
NSW Commercial Kill	123,000	96,700	167,200	220,000	520,000	691,023	488,647	644,342	400,477	222,015
TAS* Quota	-	120,000	120,000	250,000	300,000	300,000	300,000	300,000	300,000	300,000
TAS* Commercial Kill	6,601	21,426	45,471	100,803	244,918	220,226	108,000	77,000	110,000	118,000
SA** Quota	80,000	80,000	80,000	80,000	104,000	200,000	250,000	400,000	300,000	143,000
SA** Commercial Kill	43,677 (74-75)	34,524 75-76)	60,698 (76-77)	88,473 (77-78)	93,234	148,329	193,326	229,453	155,785	99,274
WA Quota	142,250	167,190	168,000	152,000	220,000	240,000	258,000	240,000	200,000	200,000
WA Commercial Kill	122,000	162,000	166,000	157,500	195,500	162,930	175,000	177,536	202,402	178,500
Total Commercial Kill	791,691	920,800	1,014,273	1,163,252	2,350,849	2,069,585	1,644,423	2,265,129	1,745,795	1,477,733

* Tasmania statistics for 1976 through 1980 from royalty payments; 1981 through 1984 statistics based on licence returns.

** South Australia cull statistics changed in 1978 to calendar year. July to December cull for 1978 was 47,523.

SOURCE: ANWS, modified by Committee (Evidence, p.53169).

Male Kangaroo Bias

5.57 In some States, professional shooters have a strong bias towards the killing of male kangaroos. Bucks can grow up to twice the size of does and there is a financial incentive for shooters to kill large animals. In Queensland, more than 80 per cent of red and grey kangaroos and euros killed commercially are males.

5.58 Many shooters also dislike the killing of does as this often requires the additional killing of young in pouch or at foot.

5.59 The Australian Federation of Animal Societies in its submission on kangaroo killing stated:

The male bias in commercial shooting has very serious implications for the whole kangaroo management program. This is because kangaroos are polygamous and the actual number of females in a population determines population growth rates as they produce the offspring.

In commercial shooting the highly selective and continuous removal of mature males increases the proportion of mature females and as a consequence the reproductive capacity of the population must also increase ...

In simple terms, commercial shooting ultimately leads to more rapid growth (and hence more kangaroos), because it selectively removes mature males but leaves mature females which are much less economic to shoot.

The commercial shooting of kangaroos and the kangaroo industry therefore cannot be shown to be achieving their stated aims of limiting or reducing kangaroo populations.¹⁵ (AFAS emphasis)

5.60 Generally speaking, commercial shooting does keep the kangaroo populations down to manageable levels. The real concern is whether the greater productivity arising from a

disproportionate number of does increases the number of kangaroos that have to be killed to achieve those levels. If the answer is yes, then more damage to properties and more suffering by kangaroos occurs than necessary. The only beneficiary is the industry because it has a 'renewable resource'.

5.61 It is not clear what are the male/female ratios of kangaroos species subject to killing and to what extent those ratios vary among species, in different areas and under different climatic conditions. Therefore, it is impossible to calculate the cost of an increased rate of breeding or of the ramifications of restoring the balance in the sex ratio of kangaroos killed commercially. By shooting more does, will this affect the conservation of those species in some areas and will there be increased cruelty in the despatch of more young kangaroos?

5.62 This is an area which requires research and the Committee **RECOMMENDS** that the ANPWS commission or arrange research into the effects of a male sex bias in the commercial shooting of kangaroos.

5.63 There is no scientific evidence available of any long-term effects on the genetics of kangaroos from the male sex bias in commercial shooting. That does not necessarily mean that there is no long-term effect; just that there is a lack of information.

Enforcement of Wildlife Regulations

5.64 The animal welfare organisations raised the questions of landholders' perception of kangaroo numbers and damage done by them and the lack of effective supervision of both commercial and non-commercial shooting. Ms. L. Stacker of Greenpeace told the Committee:

The lack of enforcement is a major problem. If we are going to have the industry it should at least be spending some money on doing exactly that. The national kangaroo management program says that you must have a legitimate complaint. I do not think it is a matter of just saying that there are too many kangaroos, because to some farmers it might be 10 but to others it might be 1000. The program still states that it has to be legitimate, so that claim will have to be assessed and it has not been done.¹⁶

5.65 Few resources are devoted by fauna authorities to the enforcement of wildlife legislation. That is more a reflection of priorities of State Governments rather than a lack of interest of fauna authorities. Those authorities have to spread their resources thinly to cover their many responsibilities in fauna and flora conservation.

5.66 The Queensland NPWS submitted that:

1. The total number of rangers employed by the service is 61 and a total number of 42 people are involved in the kangaroo industry.

2. A total of fourteen wildlife rangers are located in eight locations. The area covered by each location ranges from 53,580 km² to 427,316 km².¹⁷

5.67 In evidence to the Committee, Dr G.W. Saunders, Director of the Queensland NPWS, said:

I would have to say that in some areas a better job would be done if we had more rangers - quite obviously. In any situation you never have enough staff. But you have to be sensible about it. I am convinced that if we put on another 10 rangers not another single kangaroo would be conserved; it would not make any difference to the conservation of kangaroos. You have this gap between the surveillance level that we have at the moment and having, say, a ranger with every kangaroo

shooter or every dealer. The level that we have at the moment is quite adequate.¹⁸

5.68 Dr J. Giles, Assistant Director (Wildlife) of the NSW NPWS, told the Committee that inspections of properties on receipt of applications from landholders for tags were not done in 'each and every case'. He went on to say:

When kangaroo populations were very, very large - and they were until recently - and our resources were finite as a matter of priority, it was not practicable to do that because there were so many applications and we had many jobs to do. At the present time though, with populations down, it is much more important that there is specific local knowledge of the issues around kangaroos and ...¹⁹

5.69 This evidence was confirmed by a NSW NPWS memorandum which was submitted to the Committee by Australians for Animals. In the memorandum dated December 1982 issued by the Regional Director, Central Region, NSW NPWS, it is stated, in part, that:

Throughout the region I feel compelled to rank law enforcement and licensing as low in productivity and wildlife management worth. Furthermore, it is a responsibility where little real support can be called upon from a comprehensive information system.

While not wishing to blame the system, or the people concerned, it is apparent to me that a great deal of work is needed to rationalize the system itself. I consider that regional and district staff are hard pressed to cope at a reasonable level.

As the present system is unwieldy and of questionable value in wildlife management I now propose to:

1. Have districts direct their attention and responses to licensing enquiries to endangered fauna/flora ...

3. Inspections will not be made before licence issue unless it is suspected that endangered species or special local species may be involved.

4. Random inspections will be made in an effort to keep the trade as honest as possible.²⁰

5.70 Mr A. Howard, Acting Regional Director (Western Region) of the NSW NPWS added, referring to the inspection of properties for future licence applications:

... we will but I do not think we will be capable of doing each and every one. We will have to rely on our general knowledge of certain areas. You will appreciate that we are administering an area which takes in about 70 per cent of New South Wales and the eastern boundary would be Goondiwindi and in the south it would be Albury, and that is administered by a regional office at Broken Hill, with 29 people in the field involved in this sort of work plus all their other duties. So we will be relying heavily on local knowledge but on an increased incidence of inspections.²¹

5.71 In Western Australia, after the Committee had been told that there were 32 wildlife officers in the State, Mr K. McNamara of the Department of Conservation and Land Management, told the Committee:

It is always easy, of course, for us to say that greater inspection resources would be desirable. The resources available to us for inspection are not adequate to ensure that there is absolutely no illegal activity, but we believe that they are adequate for us to be confident that, when taken together with other elements of the program, such as monitoring, the kangaroos are not in any way threatened.²²

5.72 Mr L. Best of the SA NPWS told the Committee:

If you ask people within the Service I think they would all say that the Service does not

have enough staff to carry out all its functions. But that is a reality of life, I think, in terms of staffing constraints and funding levels.²³

5.73 Public servants have constraints imposed on them when they give formal evidence to the Committee. The comments quoted above reflect the attitude that officers of fauna authorities are coping at a level commensurate with the resources available. The relatively few wildlife rangers who often have to cover vast areas cannot be expected to do much to assess applications to kill kangaroos or about the illegal shooting of or trade in kangaroos. Although other State employees, such as members of the police force, may be authorised to carry out some of the functions of wildlife rangers, they do not have the time, knowledge of fauna matters or even inclination to perform such a role, except at the specific request of a fauna authority.

5.74 In many areas, properties are inspected when an application for a permit is for a larger than expected number of kangaroos or the application is in some way unusual. Applications received each year for a similar number of kangaroos will usually be granted as a matter of course. This procedure allows for some control over serious abuse but not for the general operation of kangaroo killing. It facilitates the regular killing of kangaroos irrespective of the damage being done. It does not provide the level of control over the killing of a protected species for, ostensibly, damage mitigation. It does, however, keep the landholder happy and provides the shooter and fauna dealer with a living.

Over-issue of Tags

5.75 Evidence given by Dr T. Kirkpatrick of the Queensland NPWS to the Administrative Appeals Tribunal indicated that the number of tags issued in Queensland in 1985 'could have been as

many as 1 400 000 in total'²⁴ which was about 320 000 more than the quota. The Queensland NPWS has explained that, for logistic reasons, it is necessary to issue more tags than the quota if the total kill is near the quota limit. Some shooters will not use all their tags which might deprive other shooters from reducing kangaroo populations in areas where there is a serious damage problem. In any event, the Queensland NPWS told the Administrative Appeals Tribunal (AAT) that the point of control is at the processor. Processors' returns are monitored and action is taken when the quota is reached.

5.76 The Committee is of the opinion that the issue of a small number of tags in excess of the quota does not necessarily lead to the overshooting of the quota, provided that adequate controls operate at the point of processing to regulate the total kill of each species. However, the fact that the quotas in Queensland and New South Wales have been exceeded is evidence of the inadequacy of those controls.

5.77 In addition, the number of tags issued above the quota is also of some concern to the Committee. In 1985 the over-issue in Queensland was almost one-third of the quota. In New South Wales, the number of property tags issued above the quota in the commercial region for commercial purposes was almost one-half of the quota. It is inconceivable that such numbers had to be issued for logistic reasons. It is little wonder that the quotas were exceeded in those States that year.

5.78 It was suggested to the Committee that the over-issue of tags is evidence of an illegal trade in kangaroo products. It is conceivable that the over-issue of tags could facilitate an illegal trade although, by its very nature, such a trade would probably operate independently of the legal trade. However, the Committee received no evidence to connect the over-issue of tags with an illegal trade in kangaroo products.

Code of Practice

Introduction

5.79 The Council of Nature Conservation Ministers endorsed in principle the Code of Practice for the Humane Shooting of Kangaroos on 30 May 1985. The Code is reproduced in Appendix 5.

5.80 In the Introduction to the Code, it is stated:

This Code of Practice has been produced to ensure that all persons intending to shoot a free-living kangaroo are aware of the welfare aspects pertinent to that activity. In this Code the term 'kangaroo' means all species of the family Macropodidae within the superfamily Macropodoidea and so applies to kangaroos, wallaroos or euros, wallabies and pademelons.

5.81 It goes on to say:

When shooting a kangaroo the primary objective must be to achieve instantaneous loss of consciousness and rapid death without regaining consciousness. For the purposes of this Code, this is regarded as a sudden and painless death. Commonsense is required to assess the prevailing conditions. Where the conditions are such as to raise doubts about achieving a sudden and painless kill, shooting must not be attempted.

The Code is intended for both professional kangaroo shooters and landholders or their agents who shoot kangaroos non-commercially to lessen damage done to their properties. The Committee comments below on various provisions of the Code of Practice.

Type of Firearm

5.82 The Code specifies that for macropods in Group 1 (red and grey kangaroos, euros or wallaroos, and agile and whiptail wallabies) a centrefire rifle with a nominal bore size 0.5969 centimetres (0.224 inches) and centrefire case capacity of at least .222 Remington must be used. The minimum muzzle energy and type of ammunition is also specified.

5.83 It is clear to the Committee, from evidence and private discussions, that many landholders, who have been licensed to shoot kangaroos on their properties, do not use appropriate firearms. Rimfire rifles, centrefire rifles of smaller calibre and less muzzle energy, and shotguns are commonly used by landholders to kill kangaroos in Group 1. Many landholders are deterred from buying appropriate rifles because of their cost. Although these firearms may kill a kangaroo cleanly under some conditions they add to the likelihood of suffering.

5.84 The Code permits the shooting with a shotgun of 'members of the family Macropodidae' not listed in Group 1. Shooters may shoot these animals in the head, neck or chest. The Queensland Fauna Dealers Association told the Committee that it opposed the use of shotguns for any reason because they did not make a quick kill and they damaged the product.²⁵

5.85 RSPCA Australia recommended in its Tasmanian study the banning of rimfire rifles and shotguns to kill kangaroos or wallabies. It argued from field studies, that these firearms caused too much suffering among wallabies. The Tasmanian NPWS is not convinced that the field studies were broad enough to enable those conclusions to be drawn. The Code of Practice does not permit the use of rimfire rifles but does allow the use of shotguns against the smaller wallabies.

5.86 The Committee supports the use of centrefire rifles to kill kangaroos or wallabies. The Committee **RECOMMENDS** that before any licence or permit is issued to kill kangaroos or wallabies, the applicant must demonstrate that he is the owner of an appropriate firearm as specified in the Code of Practice.

5.87 In view of the RSPCA's recommendation on shotguns and their widespread use against wallabies, the Committee **RECOMMENDS** that the ANPWS commission as a matter of urgency an independent research project to establish conclusively whether or not shotguns or rimfire rifles are appropriate to kill any species of wallaby humanely.

Point of Aim

5.88 The Code specifies that, when shooting a kangaroo in Group 1, the point of aim shall be the brain. It does not specify the neck, heart or any other point of the body, except when shooting a wounded kangaroo.

5.89 The RSPCA Australia considered at some length the humaneness of shooting kangaroos at particular points of the body. It reported:

All available literature examined clearly indicates that a bullet placed in the brain of an animal will cause the animal a humane death. "Death" is defined as brain death which automatically ensures the death of the whole animal.²⁶

5.90 Apart from doing a literature search, it also x-rayed 15 heads of kangaroos which had been shot in the head to determine the effect of a bullet in the brain. As a result of this examination, it reported:

From observations on kangaroos being shot, it was concluded that kangaroos shot just below the base of the ear (the preferred point of aim for professional shooters) are literally dead on their feet before they hit the ground. Wound damage is horrific, the cranium containing the brain is literally completely destroyed.²⁷

5.91 The RSPCA also investigated the humaneness of chest shots. It concluded:

... it would appear that a bullet placed in the heart of an animal so that it causes massive damage to the organ will result in the death of the animal that could be called "humane" using the criteria established by the European Parliament. However, it is probable that chest artery rupture which will cause the death of the animal does not meet the "humane" criteria.²⁸

5.92 RSPCA Australia conservatively estimated that at least 15 per cent of kangaroos shot by professional shooters are not killed humanely (that is, not shot in the head). The number not killed humanely by landholders must be considerably higher, as few landholders would be able to match the marksmanship of professional shooters.

Adherence to the Code

5.93 The Code of Practice is just that: a code. It has no legal standing until it is incorporated into State or Territory legislation or regulations. It has only a moral authority to keep the suffering of kangaroos to a minimum if they are shot.

5.94 Most professional shooters adhere to the Code. Where shooters are supplying a carcase trade, there is often a financial incentive to shoot kangaroos in the head. The same incentive does not necessarily apply for shooters killing

kangaroos for their skins only. A bullet hole does not downgrade a skin which will be used for leather. In the fleshing process, small holes, similar to bullet holes, will appear in the skins as a result of burrs and other things caught in the fur. Some skin-only shooters are less discriminating in the point of aim; their main concern is killing kangaroos, not the method of doing it. The RSPCA concluded that there was a greater level of inhumane killing among skin-only shooters.

5.95 Some landholders, armed with inappropriate firearms, combined with poor marksmanship or, in some cases, through a disrespect for kangaroos, cause untold suffering to kangaroos.

5.96 There is no doubt that landholders will kill kangaroos they perceive as a problem, some even without a licence and a permit from the fauna authority. Some do not realise that permission is necessary. There is little chance, under the present system, that they will be apprehended for killing kangaroos illegally or even less for killing them inhumanely. Most of these people are probably unaware of the Code of Practice, but even if they did know of its provisions, they would not adhere closely to them.

5.97 The initial task of fauna authorities is to ensure that all people, who are licensed to kill kangaroos, have a copy of the Code of Practice. The fauna authorities should stress to licensees that they have a responsibility to adhere to the Code and that licences are issued on the basis of such adherence.

5.98 The Committee RECOMMENDS that adherence to the Code of Practice should be a requirement of any licence or permit and failure to adhere should be grounds to suspend, withdraw or refuse to renew a licence or permit.