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14. Evidence, p. S3028.
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26. ibid., p. 43.

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5. Evidence, p. 1817.
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8. Evidence, p. 4475.
9. Evidence, p. S2860.
10. Evidence, p. S2864.
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APPENDIX 1

LIST OF WITNESSES WHO APPEARED BEFORE THE COMMITTEE
TO GIVE EVIDENCE ON KANGAROOS

Alexander, Mr P.J., Wildlife Officer, South Australian National
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Arnold, Dr G., Senior Principal Research Scientist, CSIRO,
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Auty, Mr J.H., Assistant Director, Australian Agricultural Health
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Bailey, Dr J., President, Conservation Council of Western
Australia Inc., Perth, Western Australia
Barber, Mr P.J., State Director, RSPCA Victoria, Burwood East,
Victoria
Bates, Mr V.W., Vice-President, Kangaroo Industries Association
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Bennett, Mr P., General Vice-President, Customs Officers
Association of Australia, Sydney, New South Wales
Best, Mr L.W., Senior Wildlife Management Officer, South
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Bock, Mr M.A., Chairman, The Professional Shooters Association of
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Burston, Mr G., Benambra, Victoria
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Conservation, Forests and Lands, Heidelberg, Victoria
Churchwood, Ms B., Delegate, Conservation Council of Western
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Victorian Department of Conservation, Forests and Lands, East
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Crook, Dr I.G., Assistant Director of Wildlife, Western
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Cyster, Mr R.T., President, Meat Section, Primary Industry
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Daly, Mr T., Kangaroo Project Co-ordinator, Greenpeace Australia
Sydney, New South Wales

Dempster, Mr J.K., Chief Wildlife Conservation Officer, Victorian Department of Conservation, Forests and Lands, Heidelberg, Victoria

Denny, Dr M.J.S., Consultant, RSPCA Australia Inc., Fyshwick, Australian Capital Territory

Douglas, Mr J.G., Councillor and Executive Member, National Farmers Federation, Barton, Australian Capital Territory

Ellery, Mr G.N., Member, Kangaroo Processors Association of Western Australia, West Perth, Western Australia

Errington, Mr A., Divisional Manager, Administration and Finance, Department of Conservation and Land Management, Crawley, Western Australia

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Gibson, Ms L.M., Experimental Scientist, Division of Wildlife and Rangelands Research, CSIRO, Deniliquin, New South Wales

Giles, Dr J., Assistant Director (Wildlife), NSW National Parks and Wildlife Service, Sydney, New South Wales

Gleeson, Mr J.E., Australian Game Meat Producers Association, Eagle Farm, Queensland

Grigg, Associate Professor G.C., Head, School of Biological Sciences, The University of Sydney, Sydney, New South Wales

Harries, Lt-Col. M.J., Secretary, RSPCA South Australia Inc., Adelaide, South Australia

Hocking, Mr G.J., Research Officer, Tasmanian National Parks and Wildlife Service, Sandy Bay, Tasmania

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Levy, Mr L.N., Representative, Australian Wildlife Protection Council, South Melbourne, Victoria

Livanes, Mr T., Member, Kangaroo Industries Association of Australia, and Member, Queensland Fauna Dealers Association, Yowie Bay, New South Wales

Llewellyn, Dr L.C., Principal Wildlife Management Officer, New South Wales National Parks and Wildlife Service, Sydney, New South Wales

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McCutchan, Mr J.C., Lower Plenty, Victoria

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Rawlinson, Mr P.A., Spokesperson on Kangaroos, Australian and New Zealand Federation of Animal Societies, Greensborough, Victoria

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Saunders, Mr J.R., Chairman, Kangaroo Processors Association of Western Australia, West Perth, Western Australia

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Wallis, Mr J.D., Acting Section Head, West Europe Section,
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Wilson, Dr G.R., Deakin, Australian Capital Territory
Wilson, Mr A.V., Assistant Controller-General, Barrier
Enforcement Branch, Australian Customs Service, Barton,
Australian Capital Territory
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Wright, Mr C.M., Executive Director, RSPCA Australia Inc,
Fyshwick, Australian Capital Territory

APPENDIX II

SUMMARY OF POPULATION FIGURES GIVEN SINCE 1981 FROM OR QUOTING
OFFICIAL SOURCES

DATE	FIGURE	SOURCE
May, 1981	32 million	Australian Information Service Fact Sheet.
29/3/1983	21 million	News Release, The Hon. B. Cohen, MP.
3/5/1983	21 million	Australian High Commission, London.
9/7/1983	19 million	'Manly Daily', quoting Dr G. Caughley, Professor G. Grigg, Mr J. Short.
23/9/1983	19 million	'Brisbane Courier Mail', quoting The Hon. B. Cohen, MP.
4/10/1983	19 million	Australia House, London, Press Conference of The Hon. B. Cohen, MP.
<u>1984 FIGURES</u>		
1/2/1984	19 million	'Northern Miner' Queensland, quoting The Hon. B. Cohen, MP.
16/2/1984	13-14 million	ABC's AM programme, quoting The Hon. B. Cohen, MP.
16/2/1984	21 million	'The Age', Melbourne, quoting The Hon. B. Cohen, MP.
17/2/1984	21 million	'The Australian', Editorial, quoting The Hon. B. Cohen, MP.
17/2/1984	12/14 million	Radio 2GB, The Hon. B. Cohen, MP.

22/2/1984	21 million	'Queensland Graingrower', quoting The Hon. B. Cohen, MP.
23/2/1984	21 million	'New Scientist', quoting The Hon. B. Cohen, MP.
26/2/1984	12/14 million	Dept. of Home Affairs & Environment Minute, Minister's notation, 21.
28/2/1984	19 million	The Hon. B. Cohen, MP, Question 469, House of Representatives.
5/4/1984	12/14 million	'The Australian', letter by The Hon. B. Cohen, MP.
25/4/1984	10/12 million	'The Canberra Times', quoting Alan Levitt, US Fish & Wildlife spokesman.
26/4/1984	10/12 million	'The Age'.
3/5/1984	12 million	'Queensland Country Life' quoting Professor D. Ovington, Director ANPWS.
3/5/1984	14 million or more	'Daily Sun', Brisbane, quoting The Hon. B. Cohen, MP.
23/5/1984	19 million	Letter from The Hon. B. Cohen, MP, to AFA member.
9/6/1984	19 million	'Melbourne Herald'.
27/6/1984	19 million	Letter from The Hon. B. Cohen to member of Australians for Animals.
Sept., 1984	12/14 million	The Hon. B. Cohen, MP, Statement to House of Representatives.

1985 FIGURES

6/3/1985	17 million in Qld.	Press clipping quoting The Hon. P.R. McKechnie, MLA.
13/3/1985	21 million in Qld.	'South Burnett Times', quoting The Hon. P.R. McKechnie, MLA.

17/4/1985	12 million	Department of Foreign Affairs, Telex MCH 217392
20/6/1985	17-30 million in Qld.	'Queensland Country Life', quoting The Hon. P.R. McKechnie, MLA.
25/6/1985	17 million in Qld.	'Brisbane Sun', quoting The Hon. P.R. McKechnie, MLA.
31/7/1985	in excess of 10.7 million	The Hon. B. Cohen, MP, in response to House of Representatives question 1351.
1/8/1985	in excess of 10.7 million	Professor D. Ovington, Director ANPWS in response to FOI Act.
13/9/1985	19 million	Department Foreign Affairs, Telex O.BS22501 1430.
18/9/1985	16 million	The Hon. B. Cohen, MP.
19/9/1985	16 million	'West Australian' quoting The Hon. B. Cohen, MP.
19/9/1985	16 million	'Launceston Examiner', quoting The Hon. B. Cohen, MP.

Source: Evidence, p.S3263-5.

APPENDIX III

May 1985

CODE OF PRACTICE FOR THE SHOOTING OF KANGAROOS

Issued by the Council of Nature Conservation Ministers

PREFACE

The Council of Nature Conservation Ministers (CONCOM) is composed of all Commonwealth, State and Territory Ministers having responsibility for national parks and wildlife. CONCOM is advised by a Standing Committee consisting of the heads of Commonwealth, State and Territory Authorities responsible for national parks and wildlife matters.

This Code of Practice for the Humane Shooting of Kangaroos has been prepared by the CONCOM Special Working Group on Cruelty Aspects of the Taking and Holding of Native Fauna. During the course of its preparation, drafts of the Code were circulated widely for public comment.

The Code sets an achievable standard of humane conduct and is the minimum required of persons shooting kangaroos.

Endorsed in principle by Council on 30 May 1985, the Code is intended to be implemented through education and State and Territory legislation as appropriate. This Code is based on the knowledge and technology available at the time of publication and may need to be varied in the light of new knowledge.

INTRODUCTION

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.

All shooting of kangaroos, whether on public or private land, is subject to law. The laws may differ between localities and the Government Wildlife Authority in the State or Territory in which the shooting will occur can advise on the relevant provisions. Except where specifically exempted by law, States and Territories will require the shooter to have a licence or permit issued by the Government Wildlife Authority and this Authority will specify any conditions or restrictions applying to that licence or permit.

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 divided into three sections covering the method of shooting, despatch of injured kangaroos and pouch young and shooting for scientific purposes, and has three schedules specifying firearms, ammunition and points of aim. In each section an introduction provides background to the Conditions which must be adhered to by all persons shooting kangaroos.

METHOD OF SHOOTING

The species of kangaroos which are shot differ in size and there is enormous variation in the terrain and prevailing weather conditions at the time of shooting. The combinations of firearms and ammunition are considered adequate to ensure a sudden and painless death for the target animal under most environmental conditions, provided that the shooting is done in accordance with the other Conditions set out in this Code. However, it is the shooter's responsibility to ensure a sudden and painless death for target animals, and under unusual conditions firearms and ammunition that exceed the minimum requirements may have to be used.

With a centrefire rifle a sudden and painless death is consistently achieved by the projectile striking the brain of the target animal. Thus the brain is the required point of aim for this class of weapon. Centrefire rifles are specified for all kangaroo shooting except where the smaller wallabies are to be shot in or adjacent to forest or scrub. Such shooting is often carried out in daylight; the animals are flushed at close quarters and are unlikely to be stationary. In these cases the licence or permit issued by the Government Wildlife Authority may authorise the use of shotguns. At ranges up to the maximum specified in Schedule 1 a shotgun will cause a sudden and painless death if the pattern is centred on the head, neck or chest of the target animal. The shooter must be able to place a clear shot into one of these target areas whether the animal is moving or stationary.

FIREARMS

Conditions

- (i) The minimum specifications for firearms and ammunition are set out in Schedule 1. Kangaroos shall

only be shot with a combination of firearm and ammunition that complies with or exceeds those minimum specifications.

- (ii) In the environmental conditions in which the shooter operates the combination of firearm and ammunition selected must ensure the sudden and painless death of each target animal. Evidence of compliance with the minimum specifications in Schedule 1 is no defence in administrative and/or legal proceedings concerning a breach of this Code if the combination used by the shooter has not achieved a consistently sudden and painless kill.
- (iii) Kangaroos must be shot using a centrefire rifle unless use of a shotgun is specifically allowed by the licensing authority.
- (iv) A rifle must be sighted in against an inanimate target before commencing each day's shooting.

SHOOTING PLATFORM

Conditions

- (i) Kangaroos must not be shot from a moving vehicle or other moving platform.

TARGET ANIMAL

Conditions

- (i) The target kangaroo must be clearly visible.

- (ii) When a rifle is used the target kangaroo must be stationary and within a range that permits accurate placement of the shot.
- (iii) When a shotgun is used the target kangaroo must be within the range specified in Schedule 1 and in a position where a clear shot can be fired at the head, neck or chest.

POINT OF AIM

Conditions

- (i) A shooter using a rifle must aim so as to hit the target kangaroo in the brain (see diagram in Schedule 2), except in the case of an injured or wounded animal where a brain shot might be impractical.
- (ii) A shooter using a shotgun must aim so that, whether the target kangaroo is stationary or mobile, it will be hit in the head, neck or chest by the centre of the pattern.

INJURED KANGAROOS AND POUCH YOUNG

No matter how skilled the shooter, some kangaroos will not be killed outright. Wounded kangaroos must be despatched as quickly and humanely as possible.

When killing a wounded animal a brain shot may be impractical. For example, the accurate placement of a shot in the brain may require capture and restraint of the animal; this would increase suffering and be inconsistent with the objective of sudden and painless death. In such circumstances a heart shot may

be the most humane means of despatch. In some special circumstances, where a wounded kangaroo is encountered, it may not be practicable to shoot the animal, as at a practical range the acceptable points of aim may be obscured, and at a close range the use of a high powered rifle may be unsafe. In these special circumstances a heavy blow to the skull to destroy the brain may be the most appropriate and humane means of despatch.

A skilled kangaroo shooter often shoots more than one kangaroo out of a group before driving to the carcasses to retrieve them. When a high standard of marksmanship prevails, this is acceptable provided that where an individual kangaroo is wounded no further kangaroos are shot until all reasonable efforts have been made to despatch the wounded animal.

Shot females must be examined for pouch young and if one is present it must also be killed. Decapitation with a sharp instrument in very small hairless young or a properly executed heavy blow to destroy the brain in larger young are effective means of causing sudden and painless death.

Conditions

- (i) If a kangaroo is thought to be alive after being shot, every reasonable effort shall be made immediately to locate and kill it before any attempt is made to shoot another animal.
- (ii) When located, wounded animals must be killed by a method that will achieve a rapid and humane death, where practicable by a shot to the brain.
- (iii) Under circumstances where a shot to the brain of an injured animal is impracticable or unsafe, a shot to the heart is permissible (see Schedule 3).

- (iv) In circumstances where, for despatch of a wounded kangaroo, a shot to either the brain or heart is impractical or unsafe, a very heavy blow to the rear of the skull to destroy the brain (see Schedule 2) is permissible. To ensure a humane kill, a suitably hard and heavy blunt instrument must be used (e.g., metal pipe, billet of wood etc., carried for this purpose).
- (v) If a female has been killed, the pouch must be searched for young as soon as the shooter reaches the carcass.
- (vi) The pouch young of a killed female must also be killed immediately, by decapitation or a heavy blow to the skull to destroy the brain.

SHOOTING FOR SCIENTIFIC PURPOSES

Permits to shoot kangaroos for scientific purposes are sometimes requested. Because of the circumstances and locations in which such shooting may take place, and because of specific research requirements (e.g. to obtain anatomical items such as intact skulls for diagnostic examination and museum reference collections), it may be necessary to allow exemptions from the general conditions such as point of aim and shooting platform. Such variations are not intended to detract from the primary responsibility of the shooter to provide a sudden and painless death for the target animals.

Conditions

- (i) The provisions of this Code shall apply to the shooting of kangaroos for scientific purposes except where express provision to the contrary is included

in the permit/licence under which the animals are shot.

(ii) Before the licensing authority issues such a permit/licence it should be satisfied that;

(a) if there is an Animal Care and Ethics Committee at the applicant's institution, that Committee has examined and approved the proposal; and

(b) the method of shooting will result in sudden and painless deaths for the animals authorised to be killed.

(iii) The waiving of any requirements of this Code shall not relieve the shooter of the obligation to provide a sudden and painless death for the target kangaroos.

SCHEDULE 1: Minimum Specifications for Firearms and Ammunition

(Note: Ammunition must be loaded to at least the specifications shown to ensure a sudden and painless death for the target animals)

Species	Prescribed firearm and firearm/ammunition combinations
<u>Group 1</u>	
Red kangaroo (<u>Macropus rufus</u>), Eastern grey kangaroo (<u>M. giganteus</u>),	A centrefire rifle, fitted with a telescopic sight. Nominal bore size 0.569cm

Western grey kangaroo
(M. fuliginosus),

(0.224") and centrefire case
capacity of at least .222
Remington.

Euro or wallaroo
(M. robustus),
Agile wallaby
(M. agilis),
Whiptail wallaby
(M. parryi).

Ammunition shall have an
expanding projectile (soft
or hollow point) of not less
than 324 mg (50 grains) and
and provide a minimum muzzle
energy of 1542 Joules (1137
foot-pounds).

[.222 Remington with 50 grain
projectile must be loaded to
achieve a muzzle velocity of
975 m/sec (3200 ft/sec) to
achieve this minimum muzzle
energy].

Group 2

All members of the family
Macropodidae other than
those listed in Group 1.

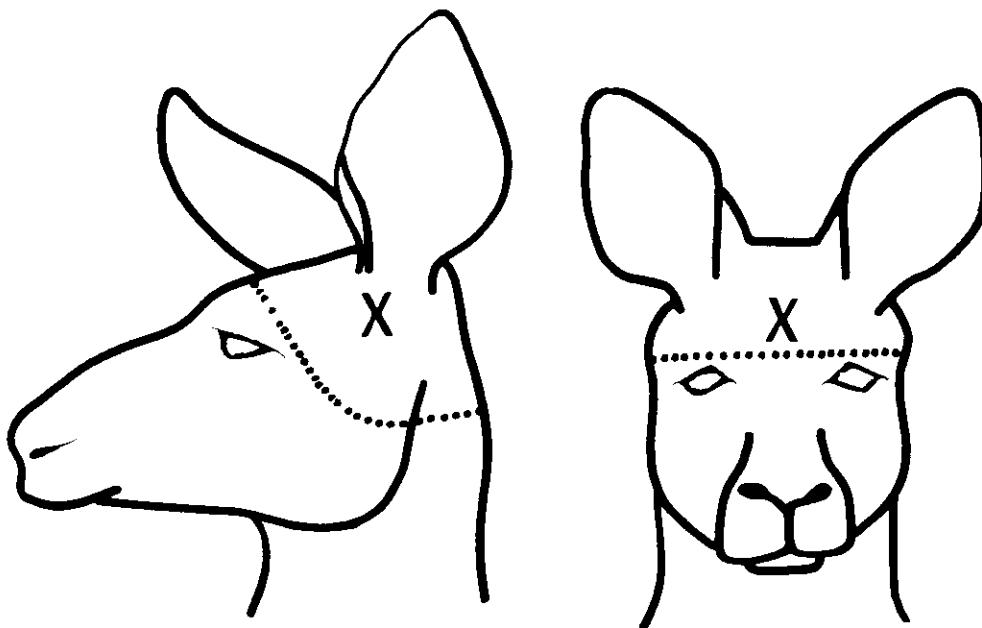
- a) A centrefire rifle fitted with
a telescopic sight. Calibre
and ammunition sufficient to
achieve at least a minimum
muzzle energy of 975 Joules
(720 foot-pounds) [e.g. .22
Hornet; 45 grain projectile and
loaded to achieve muzzle
velocity (m.v.) of at least
2690 ft/sec, or .17 Remington;
25 grain projectile loaded to
achieve m.v. of at least 3610
ft/sec].

or

- b) Shotguns of 12 gauge or larger,
using No. 2, 1, BB or larger
shot. Maximum range for
shotguns of 30 metres.

Shotgun cartridges must be
loaded to provide a dense and
even pattern [e.g. 12 gauge
cartridge requires maximum
weight of shot, 1 1/4 oz = 36g =
63 BB shot pellets].

SCHEDULE 2: Point of Aim (X) for a Shot to the Brain and Location of the Brain. (All Kangaroos)



SCHEDULE 3: Point of Aim (+) for a shot to the heart. (Applicable only as described for injured kangaroos and specified shotguns).

