REFERENCES

Chapter Two


Chapter Three

1. Evidence, p. 579.


32. Evidence, p. 2881.


34. Evidence, p. S3293.

35. Steele Rudd, 'Before We Got the Deeds' in Dad and Dave.


37. Evidence, p. 3680.


41. Evidence, p. 778.

42. H.J. Lavery (Ed.)., op. cit., p. 117.

43. Evidence, p. 4049.

44. Evidence, p. 4113.

45. Evidence, p. 4847.

46. Evidence, p. 4205.

47. Evidence, p. S3419.


53. Evidence, p. 3680.
54. Evidence, p. 1087.
55. Evidence, p. 4359.
56. Evidence, p. 4119.
57. Evidence, p. 4375.
60. Evidence, p. S2885.
61. Evidence, p. 4121.
63. Evidence, pp. S2885-6
64. Evidence, p. S2886.
67. Evidence, p. 141.
68. Evidence, p. 3849.
70. Evidence, p. 4367.
73. Evidence, p. 4733.
75. Evidence, pp. 4667, 4671.
76. L.M. Gibson and M.D. Young, 'Kangaroos: counting the cost', CSIRO, 1987, p. 64.

77. ibid., p. 64.

78. NSW NPWS letter of April 1985.

Chapter Four

1. W.E. Poole, 'Management of Kangaroo Harvesting in Australia (1984)', p. 3.


Chapter Five

1. NSW NPWS, 'Kangaroo Management in N.S.W. (To Apply from 1 January 1987)', p. 3.

2. ibid., p. 4.

3. K.J. McNamara and R.I.T. Prince, 'Kangaroo Management in Western Australia (To Apply from 1 January 1986)', p. 7.


7. ibid., p. 16.

8. ibid., p. 17.

209
9. Tasmanian NPWS, 'The Status and Management of Bennett’s Wallaby (Macropus rufigriseus) and Rufous wallaby (Thylogenale billardierii) in Tasmania’, November 1985, p. 11.

10. ibid., p. 12.

11. ibid., p. 12.

12. ibid., p. 12.


18. ibid.


22. Evidence, p. 4422.

23. Evidence, p. 2545.


26. RSPCA Australia, 'Incidence of Cruelty to Kangaroos', May 1985, p. 34.

27. ibid., p. 35.

28. ibid., p. 40.

Chapter Six


5. Senate Hansard, 21 August 1984, p. 68
8. Young and Delforce, op. cit., Table 6.6.
9. Letter dated 2 December 1983 from the Director of ABAH to the Director of ANPWS.
12. ibid., p. 27.
13. M.D. Young and R.J. Delforce, op. cit., Chapter 4, p. 2.
14. ibid., Chapter 4, p. 3.
15. ibid., Chapter 4, p. 7.
18. ibid., p. 14.
21. Evidence, pp. 2210-11
23. ibid., p. 38.
24. ibid., p. 35.
25. ibid., p. 41.
26. ibid., p. 43.
Chapter Seven

1. RSPCA Australia, op. cit., p. 76.
2. ibid., p. 76.

Chapter Eight

1. RSPCA Australia, op. cit., p. 8.
2. ibid. p. 39.
3. ibid. p. 88.
5. ibid., p. 28.
7. RSPCA Australia, May 1985, op. cit., p. 43.
10. RSPCA Australia, May 1987, op. cit., p. 89.
13. ibid., p. 58.
14. ibid., pp. 67-68.
15. ibid., p. 80.
17. ibid., p. 66.
18. ibid., p. 67.
Chapter Nine

1. Evidence, p. 5174.

Chapter Ten

1. Evidence, pp. S2832-3 and S1556.
2. Evidence, p. 2505.
5. Evidence, p. 1817.
APPENDIX 1

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

Alexander, Mr P.J., Wildlife Officer, South Australian National Parks and Wildlife Service, Adelaide, South Australia
Arnold, Dr G., Senior Principal Research Scientist, CSIRO, Midland, Western Australia
Arnold, Ms S., Co-ordinator, Australians for Animals, Sydney, New South Wales
Auty, Mr J.H., Assistant Director, Australian Agricultural Health and Quarantine Service, Canberra, Australian Capital Territory
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 of Australia, Canberra, Australian Capital Territory
Bennett, Mr P., General Vice-President, Customs Officers Association of Australia, Sydney, New South Wales
Best, Mr L.W., Senior Wildlife Management Officer, South Australian National Parks and Wildlife Service, Adelaide, South Australia
Bock, Mr M.A., Chairman, The Professional Shooters Association of Western Australia Inc., Perth, Western Australia
Brinsley, Mr P.J., Executive Officer (Wildlife), New South Wales National Parks and Wildlife Service, Sydney, New South Wales
Burston, Mr G., Benambra, Victoria
Cairns, Dr J.F., Narre Warren East, Victoria
Caughley, Dr G.J., Senior Principal Research Scientist, CSIRO, Lyneham, Australian Capital Territory
Cheal, Mr D.C., Research Botanist, Victorian Department of Conservation, Forests and Lands, Heidelberg, Victoria
Churchwood, Ms B., Delegate, Conservation Council of Western Australia, Perth
Clarke, Mr I.G., Principal Fisheries and Wildlife Officer, Victorian Department of Conservation, Forests and Lands, East Melbourne, Victoria
Cremen, Mr K.J., Executive Director, Kangaroo Industries Association of Australia, Canberra, Australian Capital Territory
Crock, Dr I.G., Assistant Director of Wildlife, Western Australian Department of Fisheries and Wildlife, Perth, Western Australia
Cyster, Mr R.T., President, Meat Section, Primary Industry Association of Western Australia, Perth, Western Australia
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
Fennessy, Mr B.V., Scientific Assistant to Chief of Division of Wildlife and Rangelands Research, CSIRO, Lyneham, Australian Capital Territory
Forbes, Mr M.A., Project Co-ordinator, Australian National Parks and Wildlife Service, Turner, Australian Capital Territory
Gee, Mr R.W., Director, Australian Agricultural Health and Quarantine Service, Canberra, Australian Capital Territory
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
Houen, Mr G.T., General Manager, Queensland Grain Growers Association, Queensland
Howard, Mr A., Executive Officer (Wildlife), New South Wales National Parks and Wildlife Service, Sydney, New South Wales
Jarman, Dr P.J., Armidale, New South Wales
Jennings, Mr K.P., Ranger-in-Charge, Lower North-Eastern Pastoral District, South Australian National Parks and Wildlife Service, Adelaide, South Australia
Jones, Mr R., Director, Fund for Animals Ltd Australia, Manly, New South Wales
Jones, Mr W., Inspector, RSPCA Tasmania, Mornington, Tasmania
Kirkpatrick, Dr T.H., Chief Research Officer, Queensland National Parks and Wildlife Service, Brisbane, Queensland
Koppensteiner, Mr E., Management Committee Member, The Professional Shooters Association of Western Australia Inc., Perth, Western Australia
Lee, Mr P.J., Senior Vice-President, Meat Section, Primary Industry Association of Western Australia, Perth, Western Australia
Lefroy, Mr P.B., President, Pastoral Section, Primary Industry Association of Western Australia, Perth, Western Australia
Levy, Mr L.N., Representative, Australian Wildlife Protection Council, South Melbourne, Victoria

216
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
Lloyd, Mr M.J., President, Wool Section, Primary Industry Association of Western Australia, Perth, Western Australia
Madden, Mr W.J., Acting Director, Cargo, Barrier Enforcement Branch, Australian Customs Service, Barton, Australian Capital Territory
May, Dr R.A., RSPCA Australia Inc., Pyshwick, Australian Capital Territory
McBride, Mr M.P., National Farmers' Federation, Barton, Australian Capital Territory
McCutchan, Mr J.C., Lower Plenty, Victoria
McEvoy, Mr J.S., Director of Field Operations, Queensland National Parks and Wildlife Service, Brisbane North Quay Queensland
McGrath, Mr M., Director, Conservation Council of Western Australia Inc., Perth, Western Australia
McLachlan, Mr. I.M., President, National Farmers, Federation, Barton, Australian Capital Territory
McNamara, Mr K.J., Senior Project Officer, Australian National Parks and Wildlife Service, Turner, Australian Capital Territory and Scientific Adviser to Director of Nature Conservation, Department of Conservation and Land Management, Crawley, Western Australia
Meischke, Dr H.R.C., Acting Principal Veterinary Officer, Australian Agricultural Health and Quarantine Service, Canberra, Australian Capital Territory
Mell, Mr D., Chief Wildlife Officer, Department of Conservation and Land Management Western Australia, Crawley, Western Australia
Menz, Dr K., Head, Rural Resources, Economics Section, Bureau of Agricultural Economics, Lyneham, Australian Capital Territory
Miller, Mr D.J., Head, Wildlife Protection Section, Australian National Parks and Wildlife Service, Canberra, Australian Capital Territory
Moore, Mr B.L., Acting Senior Veterinary Officer, Australian Agricultural Health and Quarantine Service, Canberra, Australian Capital Territory
Morris, Mr G.J., CSIRO, Lyneham, Australian Capital Territory
Mugambi, Mrs S., Director, Conservation Council of Western Australia Inc., Perth, Western Australia
Murrell, Mr P., Director, Tasmanian National Parks and Wildlife Service, Sandy Bay, Tasmania
Newman, Dr G., Director, Victorian Department of Conservation, Forests and Lands, East Melbourne, Victoria
Officer, Mr E.A, Primary Industry Association of Western Australia, Perth, Western Australia
Oliver, Mr A.J., Principal Research Officer, Agriculture Protection Board of Western Australia, South Perth, Western Australia

217
Ovington, Professor J.D., Director, Australian National Parks and Wildlife Service, Turner, Australian Capital Territory
Pearse, Mr R.J., Chief Wildlife Officer, Tasmanian National Parks and Wildlife Service, Sandy Bay, Tasmania
Poole, Mr W.E., Principal Research Scientist, Division of Wildlife and Rangelands Research, CSIRO, Canberra, Australian Capital Territory
Powys, Mr J., Department of Foreign Affairs, Canberra, Australian Capital Territory
Price, Mr J., Executive Committee Member, Pastoralists and Graziers Association of Western Australia Inc., Cue, Western Australia
Prince, Dr R.I.T., Wildlife Management Research Officer, Research and Planning Branch, Department of Conservation and Land Management, Crawley, Western Australia
Rawlinson, Mr P.A., Spokesperson on Kangaroos, Australian and New Zealand Federation of Animal Societies, Greensborough, Victoria
Reeves, Dr G.W., Chief Commodity Analyst and Acting Deputy Director, Bureau of Agricultural Economics, Lyneham, Australian Capital Territory
Richmond, Mr T., Assistant Director, Australian National Parks and Wildlife Service, Turner, Australian Capital Territory
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Saunders, Dr G.W., Director, Queensland National Parks and Wildlife Service, Brisbane, Queensland
Saunders, Mr D.S., Director of National Parks, Victorian Department of Conservation, Forests and Lands, East Melbourne, Victoria
Saunders, Mr J.R., Chairman, Kangaroo Processors Association of Western Australia, West Perth, Western Australia
Savell, Mr G.A., Secretary, The Professional Shooters Association of Western Australia Inc., Perth, Western Australia and Deputy Executive Director, Pastoralists and Graziers Association of Western Australia Inc, Perth, Western Australia
Shaughnessy, Dr P.D., Scientific Services Officer, CSIRO, Dickson, Australian Capital Territory
Shepherd, Dr N.C., Special Veterinary Research Officer, New South Wales National Parks and Wildlife Service, Sydney, New South Wales
Smith, Ms A.A., Wildlife Co-ordinator, Australians for Animals, Sydney, New South Wales
Spanswick, Mr R.G., General Secretary, Customs Officers Association of Australia, Sydney, New South Wales
Stacey, Mr A.H., Honorary State President, RSPCA Tasmania, Launceston, Tasmania
Stacker, Ms L., Wildlife Co-ordinator, Greenpeace Australia, Sydney, New South Wales
Stelmasiak, Dr T., Senior Veterinary Research Officer, Department of Agriculture, Westmeadows, Victoria
Thomas, Mr C.F., President, Queensland Fauna Dealers Association, Bulimba, Queensland
Trotter, Dr A.J., Assistant Secretary, Europe Branch, Department of Foreign Affairs, Canberra, Australian Capital Territory
Van Mourik, Dr Simone, Research Fellow, University of Melbourne, Parkville, Victoria
Wallett, Mr B.J., Consultant, RSPCA Australia Inc., Fyshwick, Australian Capital Territory
Wallis, Mr J.D., Acting Section Head, West Europe Section, Department of Foreign Affairs, Canberra, Australian Capital Territory
Warneke, Mr R.M., Senior Research Officer, Victorian Department of Conservation, Forests and Lands, East Melbourne, Victoria
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
Wirth, Dr H.J., Vice-President, RSPCA Australia Inc, Fyshwick, Australian Capital Territory and President, RSPCA Victoria, Burwood East, Victoria
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

<table>
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1984 FIGURES

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<td>'The Age', Melbourne, quoting The Hon. B. Cohen, MP.</td>
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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.


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.


1985 FIGURES


13/3/1985  21 million in Qld.  'South Burnett Times', quoting The Hon. P.R. McKechnie, MLA.
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<td>17-30 million in Qld.</td>
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<td>25/6/1985</td>
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<td>in excess of 10.7 million</td>
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<td>'Launceston Examiner', quoting The Hon. B. Cohen, MP.</td>
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APPENDIX III

May 1985

CODE OF PRACTICE FOR THE SHOOTING OF KANGAROOS

Issued by the Council of Nature Conservation Ministers
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 carcase.

(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)

<table>
<thead>
<tr>
<th>Species</th>
<th>Prescribed firearm and firearm/ammunition combinations</th>
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<tr>
<td><strong>Group 1</strong></td>
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<tr>
<td>Red kangaroo (Macropus rufus),</td>
<td>A centrefire rifle, fitted with a telescopic sight.</td>
</tr>
<tr>
<td>Eastern grey kangaroo (M. giganteus),</td>
<td>Nominal bore size 0.569cm</td>
</tr>
</tbody>
</table>
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 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, 11/4 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).