



No. 29 Western grey kangaroo

Description

The western grey kangaroo (*Macropus fuliginosus*), is one of four large kangaroos and wallaroos that occur in Western Australia. The species is distributed across the southern part of the Australian mainland.

Western grey kangaroos are large marsupials that are 97-223 centimetres from head to tail and three to 70 kilograms in weight (females weigh up to 34 kilograms). Although called grey kangaroos, they are light grey-brown to chocolate in colour with paler undersides (Figure 1). Western grey kangaroos sometimes have white marks on the forehead and, unlike other kangaroos, the muzzle is finely haired. Males have a strong, characteristic odour and well-muscled shoulders and forearms.



Figure 1 Western Grey Kangaroo (*Macropus fuliginosus*)
(Photo: Bert & Babs Wells / DEC).

Distribution and habitat

Western grey kangaroos occur in open forest, coastal heathland, mallee scrubland and woodland where rainfall exceeds 250 millimetres. They occur in south-west Western Australia from south of Shark Bay to Laverton and the Nullarbor Plain (Figure 2).

The western grey kangaroo was common in many parts of the south-west at the time of European settlement and is still common in natural habitat remnants. The principal strongholds of the western grey kangaroo are the state forests and timber reserves situated in the jarrah (*Eucalyptus marginate*) and karri (*E. diversicolor*) belts.

They are also common in the goldfields, on the southern parts of the Nullarbor Plain and in many of the bush remnants on Perth's fringes, where hobby farms provide water and green feed.

Diet

Western grey kangaroos are primarily grazers and feed on grasses and herbs in improved pastures and crops. In forest and woodland habitats, they rely on browse from native shrubs. Like ruminants, kangaroos have micro-organisms in their gut which break down fibrous plant material by fermentation.

Breeding

Western grey kangaroos breed seasonally from late November to early February each year. Young (joeys) are born while still at a very early stage of their development. At birth they weigh about 0.8 grams and climb from the birth canal to their mother's pouch, where they attach themselves to a teat. They become independent of the pouch at about 10.5 months of age but continue to suckle from outside the pouch for up to a further six months. Adult females only come into oestrous and mate again after the previous joey has left the pouch.

Unlike many other kangaroos, western grey kangaroos respond to drought conditions by ceasing breeding until conditions improve. They do not retain embryos in a dormant state in the uterus and in very dry conditions they do not come into oestrus.

Behaviour

Western grey kangaroos have a social organisation in which many of their home ranges overlap. Small groups of up to three individuals feed and rest in the same area. After resting in the shade during the day, they move out into the open to graze from late afternoon to early morning. The home ranges of western grey kangaroos have been measured at 30-200 hectares but in some areas they may be much larger.

Damage

In areas where land has been cleared, the remaining areas of bush are often too small to maintain kangaroo populations. Consequently, some of the kangaroos graze on nearby crops and pastures. Damage to lupins, barley, wheat, oats, grapevines and fruit, tree seedlings, flower crops, fences (sometimes resulting in straying stock) and pastures may result. Damage is most likely to occur in late autumn and early winter, when little green pick or nutrient rich food is available elsewhere.

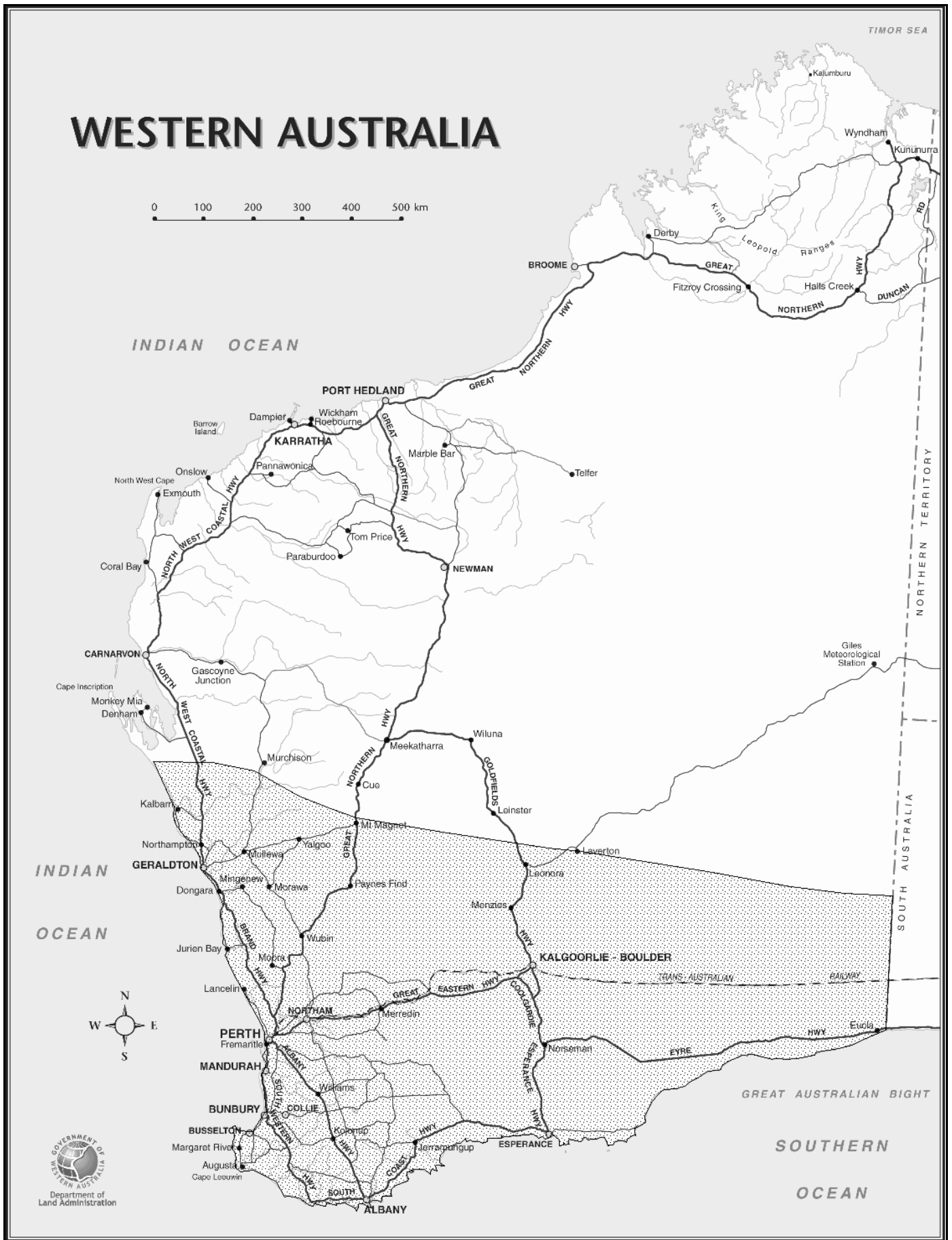


Figure 1 Distribution of the western grey kangaroo (*Macropus fuliginosus*) in Western Australia.

In more settled areas, where subdivisions adjoin bush remnants, kangaroos sometimes damage gardens and lawns or create a hazard on the road

Status and damage reduction methods

The western grey kangaroo is a declared pest of agriculture under the provisions of the *Agriculture and Related Resources Protection Act 1976*, administered by the Western Australian Department of Agriculture and Food. This declaration allows for the approval and implementation of a management program in selected shires of the state.

As a native species, the western grey kangaroo is protected under the provisions of the *Wildlife Conservation Act 1950*, administered by the Department of Environment and Conservation (DEC). Under this Act, western grey kangaroos can be shot on private land in accordance with an open season notice without the need to obtain a

damage licence from DEC. The area covered by the notice comprises many municipal shires in the south-west of the state. For a complete list of shires and other information refer to Fauna note no. 30. Western grey kangaroo management plan. DEC, Western Australia. In shires outside the open season area, a regulation five - damage licence must be obtained from DEC prior to shooting.

Shooting in settled areas, i.e. in town boundaries and semi-rural subdivisions, will usually only be allowed as a one-off measure to preserve local kangaroo populations and ensure safety. In some areas, shooting will not be permitted by either DEC or the local police, so other damage reduction methods will be needed.

Destruction should be viewed as a last resort after all other control options have been attempted. For other management options see the table below. A strategy comprising a number of techniques will probably be needed to reduce damage caused by western grey kangaroos.

Options for reducing damage caused by western grey kangaroos.

Option	Application	Benefits	Costs
Limiting food and water	Keep grassed areas to a minimum and retain bushland – this will assist in maintaining lower kangaroo numbers. Do not provide artificial food and water points.	Low-cost, non-lethal control method.	May not be possible on small properties.
Shooting	Only legal method of destruction. Fauna note no. 30. Western grey kangaroo management plan. DEC, Western Australia.	Humane if properly carried out. Effective in managing populations.	May not be suitable in built-up areas. If permitted, usually on proviso that other methods will be used in future.
Fences and gates	Sloping, plain wire electrified fences are most effective. Fauna note no. 32. Fencing and gates to reduce damage by kangaroos. DEC, Western Australia.	Safer in built-up areas and non-lethal. Suitable designs can alleviate damage. Can be less expensive than other fences.	If there are high numbers of resident kangaroos, limited shooting may initially be required to reduce numbers.
Crop location	Crops planted away from bush areas (400 metres or more in one study) are less likely to suffer damage.	Low-cost, non-lethal control method.	May not be possible on small properties.
Scaring	Noise-generating devices including firearms.	Humane and safer in built-up areas. Not tested for effectiveness on kangaroos, but may be useful for short-term control.	
Poisoning, snaring, dog baiting	Illegal under the <i>Wildlife Conservation Act 1950</i> .		Poisons may affect other animals including farm dogs. Snaring and dogging are cruel, ineffective and can result in damage to fences and crops.

Further reading

Fauna note no. 30. Western grey kangaroo management plan. DEC, Western Australia.

Fauna note no. 32. Fencing and gates to reduce damage by kangaroos. DEC, Western Australia.

References

Poole, W.E. (1995) Western Grey Kangaroo. In. The Mammals of Australia. (Ed. R. Strahan.) Reed Books, Chatswood.

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Long, J.L. (ed.) (1990) Declared Animal Control Handbook. Agriculture Protection Board, Perth.

Arnold, G.W., Steven, D.E. and Weeldenburg, J.R. (1989) The use of surrounding farmland by western grey kangaroos living in a remnant of wandoo woodland and their impact on crop production. *Aust. Wildl. Res.* 16: 85-93.

Further information

Contact your local DEC office.

See the department's website for the latest information:

www.dec.wa.gov.au

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Further Information

Contact your local office of the Department of Environment and Conservation.

See the Department's website for the latest information: www.dec.wa.gov.au.

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