

Guide to the kangaroos of Fowlers Gap

Introduction

Fowlers Gap contains a large population of Red Kangaroos and Euros. The abundance of these species varies with the run of the seasons but averages around 6,000 Red Kangaroos and 2-3,000 Euros. In addition, the Station supports smaller populations of Eastern and Western Grey Kangaroos of around 100 and 500 individuals, respectively.

Throughout the Western Division these four species are shot by a commercial industry set up to cull populations in order to mitigate perceived damage to agricultural production. This practice has not been pursued on Fowlers Gap since the University

in fact blue-grey, Eastern Grey Kangaroos are grey through to brown and Western Grey Kangaroos are dark grey through to black. Common Wallaroos, of which the Euro is a sub-species, are grey, grey-brown, dark grey or even black.

This guide will lead you through the identification process as there are distinctive facial and other morphological features to each species and they typically segregate to some extent amongst habitats. The guide will illuminate interesting differences in their biology and highlight some of the remarkable behaviour you may see. We hope you leave Fowlers Gap better informed about kangaroos, and with a desire to not only come back to appreciate more but to go on a quest around Australia to see the other 42 species of Macropodoids.

Red Kangaroo

Macropus rufus ('red long-foot')



Identification

Red kangaroos have a white facial stripe from the corner of the mouth towards the

complex fore-stomachs where they garner the assistance of specialised bacteria and a few protozoa and fungi to break down plant fibre in a fermentative chamber. They gain about 70% of the available energy in the

populations are female-biased. Populations boom in a run of good years and then crash with a hard drought.

: You should watch mothers, particularly those with large pouch young in the late afternoon. At this time you may see the first unsteady excursions of the young as it overbalances or is dumped out of the pouch. As they gain coordination, they play around the mother, hopping in quick excursions from her as a safe base, and sometimes returning to briefly batter her head in play.

: If you see several males in the vicinity of a female who all seem intent on keeping her in close range then you will be in for an interesting insight into mating behaviour. You should note the largest male positioning himself as consort and stroking the base of the female's tail to test her readiness to mate. Other males may challenge him and

Kangaroos. Females are relatively short and small and rarely exceed 25 kg. Their coat colour varies from light grey through light tan to dark grey. Males are short but very stocky with pronounced forearm musculature when mature. They reach around 50 kg and show a similar variation in coat colour to females but are distinguished

young-at-foot dies, then the pouch young as
the mother cannot meet its milk

typically swift and the winner delivers hard kicks to its opponent's abdomen while raking its face and biting its ears in a clinch. You can tell something about a male Euro's

has been lost to croplands, which may have exerted some westwards pressure. We also need to recognise that climate has varied enormously over its evolutionary history and no doubt the species has occupied and perhaps dominated the far west of NSW in wetter periods in the past.

Foraging behaviour

Eastern Grey Kangaroos are also primarily grass eaters and so potentially compete with Red Kangaroos and Euros. Microhabitat differences tying the Eastern Greys to dense lateral cover for daytime shelter keep the species somewhat apart.

Reproductive behaviour

The reproductive biology of the Grey Kangaroos sets them apart from the Red Kangaroos and Euros. Development of the offspring is much slower so that young of comparable size permanently exit the pouch at around 320 days compared to 235 in Red Kangaroos and are weaned at 540 days compared to 360 in Red Kangaroos. Breeding is more seasonable with a broad peak in births from October through to March, although this may be more variable in the arid zone.

Eastern Grey Kangaroos do not mate immediately after birth since the oestrous cycle is around 10 days longer than length of pregnancy. They may also mate while they have a young in the pouch, which is about six months old. The resulting embryo remains quiescent (in diapause) due to inhibition of further development while the female is lactating. It is born when the pouch young permanently exits or dies prematurely.

In temperate habitat, a single alpha male has exclusive dominion over a mob of females that may number 30-40 or more. His tenure is typically a single year and competition for the top rank is especially fierce. Females often aggregate with their female relatives so that a group of daughters, mothers, grandmothers and so on may form. This seems to provide greater reproductive success in the younger females

Western Grey Kangaroo

Macropus fuliginosus ('Sooty long-foot')

Identification

Western Grey Kangaroos show all the same characters of their Eastern counterparts that enable you to distinguish them from Red Kangaroos or Euros. Thus the problem is how to tell an Eastern and Western Grey Kangaroo apart. The Western Grey is typically a little stockier and much darker. Its fur may grade from a dark chocolaty brown to almost black but with lighter underparts. The diamond between the eyes is typically dark as are the tips of the ears. Their head is a little more solid.

: The sexes differ in size in a similar range to Eastern Grey Kangaroos but the mature males have a distinctive curry-like odour. This has led to the common name of 'stinker' in some parts and an aversion to taking this species for human consumption.

Habitat

Western Grey Kangaroos tend to be in the more shrubby areas and Eastern Grey Kangaroos on the grassland. Typical habitat is scrub or mallee in the heart of their range in South and Western Australia. On Fowlers Gap you are most likely to see them around acacia thickets on the 'Gap Flats' in the eastern part of the Station. In summer you will see them drinking at stock troughs and tanks in the evening.

Like Eastern Grey Kangaroos, Westerns are near the margin of the range on Fowlers Gap (the north-easterly margin in this case) and are presumed to be relatively recent arrivals in the 1970's. They have suffered

substantial habitat loss through the clearing of mallee for crops, which accelerated during this same period so to some extent they are 'refugees'. They are more abundant than Eastern Grey Kangaroos as you approach Broken Hill. In both western NSW and northern South Australia there is some concern that they are 'taking over' from Red Kangaroos. This is likely the result of selective shooting for the human consumption market where Red Kangaroos are favoured as the meat is untainted by a distinctive smell.

Reproductive behaviour

The reproductive biology of Eastern and Western Grey Kangaroos is very similar. However, Western Grey Kangaroos do not show diapause and so only have two dependent generations of young (one in the pouch and one at foot). The pouch must be permanently vacated for the female to mate againKate f

equally fascinating as the other three species and their resilience has been proven by their persistence in small woodland refuges amidst broad-acre crops.

Further Reading

A large number of original research papers and theses have been produced by past and present members of the School of Biological Science and their collaborators. Research papers for the decade 1990-2000 can be found on the Fowlers Gap web site