

Manager, Conservation Research, Environment, Planning and Sustainable Development
Directorate
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Dear Sir/Madam

Proposed Changes to ACT Kangaroo Management Plan

Kangaroos are an asset to the grassy woodlands and should not be killed. They are soft footed, provide nutrients to the plants and the best keepers of the grassy woodlands!

I have read the eight local studies on the effects of Eastern Grey grazing on biodiversity and wish to make the following observations. I also note there might be a conflict of interest with authors associated with institutions partly funded by the ACT Government. The studies have been undertaken by mostly the same people relating mostly to Goorooyaroo and Mulligans Flat grassy woodlands.

The first study by S McIntyre et al 2010 concludes 'Continued high levels of grazing MAY inhibit soil, water and nutrient processes for healthy functioning of grassy woodlands'. In the ten years prior to 2010 only one year(2005) recorded average rainfall. Nine years recorded well below average.

All the grasslands were under terrible stress whether the presence of Kangaroos or not.

In a later study in 2015 by McIntyre, Cunningham, Donnelly and Manning Restoration of eucalypt grassy woodland states 'this longer term study has shown the overriding role of climate in driving plant production in temperate reserves'. 'The biomass increasing by 67% mostly due to perennial native grasses over the four years.

Average rainfall was almost back to normal with one year in the four years above average. A completely expected outcome!

The Manning Cunningham Lindenmayer 2013 Bringing forward the benefit of coarse woody debris in ecosystem recovery under different levels of grazing and vegetation density and the Barton, Manning, Gibb,Wood, Lindenmayer and Cunningham 2011 Experimental reduction of native vertebrate grazing and addition of logs benefit beetle diversity at multiple scales.

Of course the placement of logs would alter the dynamics of the woodland. Sediment and debris builds up around the logs and provides shelter for all kinds of insects, seedlings and

reptiles. This is a naturally occurring process in all grassy woodlands.

It's ironical that the logs placed there were from destroying endangered yellowbox/redgum grassy woodlands to build suburbs. How many Earless dragons and legless lizards would have been destroyed through that process?

Burning is detrimental to everything as it kills the things you are trying to protect! It bares the soil causing erosion and weed infestations. Aboriginals burnt the land to produce food for themselves as some of the plants they ate responded to fire but in most cases it profoundly changes the mix of forbs/shrubs particularly if regular burns are undertaken.

The two studies by Brett Howland on habitat preferences concluded a mix of grass lengths was required to sustain reptiles this structure naturally occurs in all grassy woodlands a mixture of tall tussock grasses, some under storey shrubs, poor soil where not much grows and damp areas with small forbs and grasses. There are several grasses that Kangaroos choose not to eat and these areas provide plenty of shelter to reptiles and birds.

There needs to be another urgent study - **'Native species forced out of house and home by Weeds and Foxes'**. **This includes Kangaroos, birds, reptiles, insects, lilies, orchids and small forbs.**

For several years now St Johns Wort covers much of the open grassy areas in the south side reserves flowering in spring and seeding in summer. We have lost all our birds of prey in this time, including nesting wedge tail eagles, which had lived in the area for some 30 years. The Kestrels have gone as has the Collared Sparrow Hawk. The reason they cannot see their prey the grass lands are smothered in a sea of knee high yellow in spring and dark brown seeds all summer. From a bird's eye view it is impossible to see or locate their prey. The Button Quails have gone due to nothing being done to control foxes. Foxes should be shot not Kangaroos. St John's Wort rosettes out compete the summer flowering lilies, Chocolate Lily, Blue Grass Lily, Vanilla Lily, Yellow autumn Lily, Fringe lily, Blue Devil and several of the late flowering Australian grasses - hence a reduced amount of grass for the kangaroos and no delicate native plants. Lost native plant life reduces habitat for insects and reptiles and birds. Yet no resources go into rectifying this terrible weed situation but a great deal of money goes each year for the mass shooting of kangaroos.

Killing kangaroos each year will eventually lead to their distinction. Evolution determines the strong and dominant features and shooters meeting predetermined numbers have no idea if they are shooting strong or weak features. The kangaroos should be left to the natural cycles of drought and abundance to determine the strongest. This ensures the continuation of the species when unexpected events happen.

The term culling is incorrectly used. Culling is to identify weak and old animals and to shoot them to avoid them suffering. Unnecessary killing describes what is happening at present

As bureaucrats you probably do not often venture out to see the state of the neglected south side reserves. You probably take advice from the managers of these reserves who also don't often venture out to see what they are supposed to be managing. Perhaps that might be a good starting point before you make the decision to continue on your path of destruction.

Yours faithfully

