CHAPTER 1: LIVING IN THE AUSTRALIAN ENVIRONMENT

MARK STAFFORD SMITH*
Desert Knowledge Cooperative Research Centre. PO Box 2111, Alice Springs, NT 0871, Australia

1. Introduction

For 100 years after the Europeans arrived in Australia, their painters portrayed a landscape which harked back to the soft lights of Europe, their poets wrote wistfully of their respective mother countries, and their music was folk songs from rural Britain. In the context of this culture, rooted in Europe, men of the land (it was mainly men) carried out farming as if it was merely a matter of applying a fine work ethic to subdue the country into a reliable European image.

Around the end of the 19th-century, artists began to portray a harsher countryside, poets to extol a more local larrikin approach to life, and composers began to incorporate images of the bush peculiar to Australia like the kookaburra into their music. In 1894, the first major scientific expedition to central Australia, the Horn Expedition, reflected these changing views (Spencer 1994). Among its participants there were still those seeing a landscape with European eyes; but others, most notably Baldwin Spencer, had begun to see how the country varied spatially as they moved through it on their camels, and through time as he visited repeatedly over the following years. Spencer met pastoralists who were beginning to understand and take advantage of this new land. But his descriptions still make it clear that most inhabitants regarded the ups and downs of climate as being an unfair imposition from on high, rather than a normal feature of the environment, to be managed and celebrated.

This chapter briefly outlines the special features of the Australian physical and social environment which affect the way we manage our non-urban areas. The outback, which has had a deeply symbolic place in the way Australians view their country, today mainly refers to the arid and semi-arid interior. What has been viewed as outback has changed over the years—at one time everywhere across the Blue Mountains was included, but the boundary between outback and inside country slowly flowed towards the interior as settlement proceeded. However, issues of drought management affect all non-urban areas and many of the issues which are writ large in the arid zone still affect other regions in a slightly more subdued fashion.

*This chapter was first published in Beyond Drought: People, Policy and Perspectives; Linda Courtenay Botterill and Melanie Fisher (eds). CSIRO PUBLISHING, Melbourne 2003. Reproduced by permission of the Publisher.
2. The Biophysical Environment

Key features of the Australian biophysical environment have been summarised many times (see for example AUSLIG 1992; Beadle 1981; Friedel et al 1990; Groves 1994; NLWRA 2002; Stafford Smith 1994a). It is easy to generalise across the whole continent, and such statements must always be tempered with the real diversity of more local conditions. This will become important when we come to consider the scale at which issues such as drought should be managed. For example, we inevitably focus on the nature of climate in Australia, but as Figure 1 shows, there is an immense diversity of climatic patterns represented in the continent, from the relatively reliable monsoonal systems in the North through the incredibly uncertain arid centre to the somewhat more reliable temperate southern systems. We will return to this issue.

![Seasonality and median annual total rainfall across Australia](after AUSLIG 1992)

At the base of it all, this is an ancient continent, worn into low relief by millions of years of exposure to the changing atmosphere, and concentrated into salt lenses and silcretes by an equal period of leaching. Coupled with the resulting low productivity, at least for the last few tens of thousands of years, the continent has been located in a particularly variable part of the earth’s climate system. On top of the normal annual variability found in all semi-arid areas in subtropical to temperate zones of the planet, Australia experiences additional multi-annual variability drivers such as El Niño (Nicholls and Wong 1990). We are also increasingly recognising that there is an inter-decadal timescale of variability that may be specifically modulated by the ‘Inter-decadal Pacific Oscillation’ but is affected by other long cycle events in the world’s oceans; and