

Dr Neil Burrows

Senior Principal Research Scientist - Department of Parks and Wildlife, Western Australia

Managing bushfire in the new millennium

The new millennium has brought with it a spate of devastating bushfires across southern Australia; in central and northern Australia, vast tracts of land continue to be blackened by harmful hot fires.

Drought and extreme fire weather events attributable to climate change, and the regional buildup of flammable vegetation as a consequence of a reduction in area treated by prescribed burning, are key factors giving rise to mega-fires in southern Australia. The cessation of traditional Aboriginal burning practices across much of central and northern Australia has resulted in significantly altered fire regimes.

Today, public land managers are required to manage fire for multiple outcomes including reducing the bushfire risk to human communities, conservation and environmental values. While the practice is contentious, prescribed burning is critical for managing flammable fuels to mitigate adverse impacts of bushfires on the things we value. Wise application of prescribed fire is also integral to maintaining biodiversity, ecosystem health and to reducing greenhouse gas emissions. Climate change, changing land use and land owner demographics, industrial legacies, population growth, declining resources, opponents to the practice, and onerous risk management and planning procedures have contributed to a decline in prescribed burning. While fire and land managers can do little about climate change, they can work with the broader community to reverse the declining trend in land treated with prescribed fire. This requires integration of scientific and traditional knowledge, practical experience, community engagement and support, and political and organisational commitment to adaptive management in a changing world.