Feeling the heat

International perspectives on the prevention of wildfire ignition

Janet Stanley

University of Melbourne

Alan March

University of Melbourne

James Ogloff

Swinburne University of Technology

Jason Thompson

University of Melbourne

Series on Climate Change and Society



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The Powerful Owl, *Ninox strenua*, is Australia's largest owl with a wingspan of up to 140cm. It occurs in Eastern and South-Eastern Australia, mostly in large forested areas. The Powerful Owl mates for life, which can be over 30 years, and nests in large tree hollows in eucalypt trees that are at least 150 years old. The Powerful Owl is threatened with extinction and would have been severely impacted by the recent wildfires in Australia. It is also adversely affected by high-frequency prescribed burning, as this reduces its food supply of smaller birds and mammals.

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Preface

This book aims to join up the story on wildfires to provide a strategic perspective on the vital but internationally neglected topic: the prevention of wildfire. Wildfire is commonly considered and addressed in three segments, comprising: pre-fire planning, suppression of the fire, and post-fire recovery. However, there is a stage before this – prevention of ignition. The term 'prevention' is sometimes linked with pre-fire planning, but the idea of 'planning' commonly carries the tacit assumption that something is going to happen. While, of course, not all wildfires can be prevented, overlooking preventative actions promotes a belief of an inevitability that no wildfires can be prevented.

There is possibly a range of reasons for this oversight. The agency responsible for wildfire in industrialised countries, fire services or fire brigades, have historically been tasked with undertaking fire suppression. They have become specialised in dealing with the fire occurrence itself, rather than the much broader issues in relation to wildfire, such as: What is the cause of wildfire? Why is wildfire increasing? What is the impact of wildfire? What is the best way to prevent wildfire? Who should be involved in decision-making around wildfire? What values are under threat by wildfire? At the same time, other disciplines have been reluctant to add their contribution to the wildfire conversation. This is perhaps due to the competence of fire services in the task of extinguishing fires, but also the speed of change in numbers and severity of wildfires now experienced, has caught people unprepared. Linking multiple voices is complex, especially when the structures for such a process are not in place. It is also difficult to bring about major changes when complexities around power, gender, politics, ideology and hierarchical systems are present, as has evolved in some fire services, some government departments, and some lobby groups.

This book seeks to highlight the dichotomy between the situation that a significant proportion of wildfires are caused by humans, while the great majority of actions in relation to wildfire involve changes to the natural environment. This is undertaken in the context of climate change, species extinction, and emergencies, due to fossil fuel use and land clearing, leading to conditions that will be inhospitable to current human societies. In the words of climate scientists, a deep transformation based on a fundamental reorientation of human values, equity, behaviour, institutions, economies, and technologies, is required.

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While an international perspective has been attempted in this book, the complexity and size of the topic, the widely different situations and approaches taken between countries, as well as the lack of empirical knowledge in many associated areas, creates considerable difficulties in coming to grips with the field of wildfire. Much information sits in grey literature and the media, which is both difficult to access and of variable quality. Some areas of wildfire occurrence are almost totally over-looked, especially wildfire in industrialising countries associated with land-use change, economic gains and conflict. However, despite the limitations, it is hoped that this book offers a much wider perspective than is traditionally given around wildfire, such that it will stimulate a broader inter-disciplinary involvement in the field and encourage researchers to begin to fill in the multiple knowledge gaps. Indeed, it is argued that such an approach is vital if there is to be any hope of reducing the occurrence of wildfire as the planet becomes hotter.

The authors of this book come from widely different disciplines. The difficulties associated with an integrated approach to the prevention of ignition, as well as the need for this, is evident in this book. The integrated story is only just beginning. In part due to some differences in disciplinary approaches, the chapters have been written so that each chapter can be read as a body of work on a particular subject, as well as part of a more complete story.

Finally, while this book was being published, the catastrophic wildfires in Australia continued to devastate the country. The world was watching. One positive outcome to be taken from this disaster was a call by many Australians for greater action on climate change and to a lesser extent, for protection of the natural environment. At the same time, the shortcomings of the current responses to wildfire in Australia was revealed. This was in terms of confusion about fire ignition and prevention, the extent of ideology rather than evidence that is influencing opinions and policy, and the need for more resources for fire suppression. It is yet to be seen as to whether these deficits are addressed in the future. It is hoped that this book will encourage a more effective response in Australia and internationally.

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