

PRESCRIBED BURNING IN AUSTRALASIA. THE SCIENCE, PRACTICE, AND POLITICS OF BURNING THE BUSH

Edited by Adam Leavesley, Mike Wouters, and Richard Thornton

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Prescribed burning, the application of a planned fire ignition to meet specific objectives, has long been practiced around the world and has emerged as a keystone land management process. It has, however, gone through periods of robust endorsement and application followed by periods of scant use and contentious views regarding its value and safety. In Australasia, prescribed burning has a long and rich history rooted in indigenous and local ecological knowledge and is now receiving increasing attention for escalated use. But, as McCaw and Burrows state in their chapter, Australia is a continent with a highly urbanised population where many have become unaware of the reality of living in a fire-prone environment and regards fire as a threat.

An initiative of the Australasia Fire and Emergency Service Authorities Council (AFAC), Forest Management Group, and the Commonwealth of Australia, called the National Burning Project, was established to help develop a national approach to prescribed burning. This book represents the final product from that project. In it, Leavesley, Wouton and Thornton have compiled a very comprehensive collection of the state of the knowledge of prescribed burning in Australasia. They have captured the history, assembled considerable information about current practices and objectives, included both favourable and controversial viewpoints, and built valuable descriptions of experiences, local needs, and best practices for today's land managers. The information presented throughout this book gives a clear picture of prescribed burning as a total program. It equally addresses the positive versatility and applicability of prescribed burning as well as different perspectives, a wide range of social views, political realities that can constrain use, contested opinions of effectiveness, and potential negative ecological effects.

This book differs from other products in that it has endeavoured to provide a detailed description of information about multiple attributes associated with prescribed burning. Its uniqueness is displayed in a structure that apportions the book into three distinct parts. Part 1: Different Things to Different People, appraises the social context of prescribed burning, including Indigenous burning. Part 2: Evidence-Led Management, reviews contemporary research, and Part 3: Expert Opinions, is a collection of opinions from recognised experts in bushfire research and practice.

This three-part approach affords a refreshingly interesting style that delivers information ranging from historical to current practices, relevant science, current and past viewpoints, and societal expectations; all useful for informing land management policy. The full spectrum of the complexity and knowledge of these subjects is well addressed in a total of 33 chapters with contributions from more than 50 authors. In addition, an

attention-grabbing bonus is the inclusion of a series of photographic foci positioned throughout the three parts that visually highlight, with concise narratives, prescribed burning, different vegetation types, and specific individual types of work.

In my view, this book, as presented, has no weaknesses, only strengths. It adds much to the collective knowledge of prescribed burning in Australasia and addresses a thorough cross-section of cultures and practices across the region.

The partitioning of material into three parts is unique, clear, and well defined. While each part is fully capable of being a significant standalone product, collectively the three parts represent a commanding documentation of knowledge, best practices, and social perspectives and demands and establishes a solid foundation of Australasian bush prescribed burning information. Each of the three parts provides interesting and thought-provoking information, and upon reading each one, the reader will be struck with the importance and appeal of that particular information, only to find it improved upon by the next part and area of focus.

Part 1 examines an essential area that is becoming increasingly more important. As the Editors state, burning programs of today and tomorrow have evolved from government programs that often lacked awareness of external needs, requirements, and concerns. They now function as a collaborative process where consideration and involvement of the public and communities is paramount. This part considers the social aspect of prescribed burning with the notable inclusion of an extended chapter about Aboriginal burning.

Part 2 synthesises seven areas of knowledge that strengthen prescribed burning including: prescribed fire as a tool for land management, prescribed fire effectiveness, carbon and water effects, runoff and erosion, environmental effects, use of ecological burning, and the risk of escapes. Each of these topics is well summarised in terms of applicable research with recommendations for operational improvement.

Part 3 offers a new and unique slant on how prescribed burning information is presented. The inclusion of opinions from renowned prescribed burning experts is extremely valuable and offers something that few, if any other literature essays offer. Each author was provided a set of questions to answer however they chose. The questions addressed specific areas of concern where additional knowledge can be advantageous to the program. Some authors chose to present statements supported by published literature references rather than strictly their own opinions, but notwithstanding, this section contains information about specific issues and by reading this part, readers will amass substantial information about prescribed burning. Particularly relevant are answers concerning prescribed burning effectiveness, existing research gaps, program implementation limitations, and influential external factors.

The overall focus of author contributions is directed towards healthy landscapes, resilience, traditional knowledge, and modern science and technology. But, a strong undercurrent of support

for increased use of prescribed burning pervades the book, with abundant justification. The book tells the complete story of prescribed burning, from Aboriginal practices to current day practices, and clarifies the transformation of prescribed burning from a commonplace, frequent well managed occurrence to a subordinate component of the fire management system forced to compete for funding and resource staffing and beset with differing opinions on value and use. A notable quote from Kevin Tolhurst, '*Its not fire I fear, but the lack of it*' dramatically sums up the state of the practice and need for increased attention as the realities of bushfire risk, and occurrence worsen.

This book is interesting, comprehensive, well written, well researched, and pleasantly unambiguous. The Editors set out to produce an essential reference for bushfire professionals, land

managers, scientists, policy makers, volunteer firefighters, rural homeowners, and all Australians interested in this controversial topic. They have without a doubt, succeeded in accomplishing that goal and have produced a valuable reference that will be useful for years to come and is requisite reading for all individuals and groups interested in prescribed burning. While there is no better source to set the complete stage for prescribed burning in Australasia, the book presents principles having applicability globally.

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