



New books, articles and reports in your library this month



Eamon already knows that the NSW Rural Fire Service library has a book for everyone!

Members, schools and interested groups are welcome to borrow books from our collection of children's literature to help with engaging children to think about bushfires. More information found [here](#) on the library website

FIRE INCIDENTS – AUSTRALIAN



[Black Summer : stories of loss, courage and community from the 2019-2020 bushfires](#) (Book)

Edited by Michael Rowland, 2021

Told by ABC journalists who were on the ground and broadcasting during our worst ever fire season, spearheaded by Michael Rowland This book contains updates, new stories and overviews by them, as well as reflections on how such a catastrophe occurred and what we have learnt from it.

Please contact the library to request a loan of this book



[Firestorm : photographing the frontlines of the "Black Summer" bushfires](#) (Book)

Nick Moir, 2020

This beautiful book documents the photographs and words by severe weather and fire photographer Nick Moir from October 2019 to late January 2020. Nick was present at many of the fire season's worst days and his images display the battle to save homes and lives by the major fire agencies.

Please contact the library to request a loan of this book

Open data shows lightning, not arson, was the likely cause of most Victorian bushfires last summer (News article)

The Conversation, 18 December 2020

EMERGENCY MANAGEMENT



Gender balance in Fire and Emergency Going beyond 'it's the right thing to do' The Case for Change (Report)

Male Champions of Change (MCC) Fire

and Emergency Group and AFAC have jointly produced a report demonstrating the case for gender balance in the fire and emergency sector. In the report leaders from across the Fire and Emergency Sector address the common questions 'Why does the gender composition of our workforce matter?' and 'Why should we dedicate time to this issue in particular?' and together present the case for change.

Use this [COCC link](#) to read the report online.

"Lessons Will Be Learned" A euphemism for failure? (Journal article)

Emergency Management Review, Vol 4, no 2, 2020

Using two recent public inquiry reports, [The Manchester Arena Bombing](#) (Kerslake, 2017) and [The Grenfell Tower Fire](#) (Moore-Bick, 2019), this paper examines the failure of response organisations to learn lessons from serious incidents. It posits the view that such organisations fail because of their barriers to learning.

Please contact the library to request a copy of this article.

Integrating wildfire risk management and spatial planning – A historical review of two Australian planning systems (Journal article)

The authors dug into open data resources to learn more about the causes of last summer's bushfires in Victoria, and further test the arson claim. Our analysis suggests 82% of the fires can be attributed to lightning, 14% to accidents and 1% to burning off. Only 4% can be attributed to arson.

Read the news article online using [The Conversation link](#)

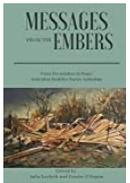


[Sampson Flat Bushfire - January 2015 : A history - 100 individual accounts of lessons learned - stories and photos](#) (Book)

Compiled by Jan Verrall and Denise Elland, 2020

The Sampson Flat Bushfire was considered the most destructive fire in the Adelaide Hills for more than 30 years. This book is a record of the bushfire as seen through the eyes of the firefighters and residents who experienced it. Sharing their experiences either from interviews or submitting their own personal stories provides a valuable insight to anyone faced with the threat of fires or other natural disasters.

Please contact the library to request a loan of this book



[Messages from the Embers : from devastation to hope: Australian bushfire poetry anthology](#) (Book)

Edited by Julia Kaylock, 2020

A varied and very moving poetry anthology, this publication was put together in the wake

of the horrific bushfires that swept through Australia in 2019 through to 2020.

Please contact the library to request a loan of this book

FIRE INCIDENTS – INTERNATIONAL



[To the last smoke : an anthology](#) (Book)

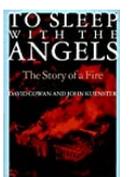
Stephen Pyne, 2020

From boreal Alaska to subtropical Florida, from the chaparral of California to the pitch pine of New Jersey, America boasts nearly a billion burnable acres. In nine previous

volumes, Stephen J. Pyne has explored the fascinating variety of flame region by region. In To the Last Smoke: An Anthology, he selects a sampling of the best from each.

Please contact the library to request a loan of this book
Listen to the author Stephen Pyne discuss his books using this [YouTube link](#).

[Click here](#) for a list of Stephen Pyne's books available to borrow from the library.



[To sleep with the angels : the story of a fire](#) (Book)

David Cowan, 1996

International Journal of Disaster Risk Reduction, Vol 53, February 2021

Recent wildfires burning throughout Australia highlight the vulnerability of settlements located in wildland urban interface (WUI) areas. This research examines how Australian spatial planning institutions and instruments evolved since European settlement to incorporate wildfire considerations, through a qualitative comparative case study approach of two Australian states.

Please contact the library to request a copy of this article

MAPPING AND REMOTE SENSING



[The Australian Flammability Monitoring System: providing a clear picture of landscape dryness](#) (Hazard note 88)

BNHCRC, 22 January 2021

The Australian Flammability Monitoring System provides a clear picture of vegetation and soil dryness across the Australian landscape. It is the first national-scale, pre-operational fuel and soil moisture content and flammability monitoring system in Australia, delivering accurate spatial information in near-real time.

Use this [BNHCRC](#) link to read the hazard note online.

The **Australian Flammability Monitoring System** is available online [here](#)

LEADERSHIP AND MANAGEMENT



[We're all in this together : creating a team culture of high performance, trust, and belonging](#) (Book)

Mike Robbins, 2020

In this book, Mike Robbins dives deep into the ways great teams build trust, collaborate, and perform at the highest level. As an expert in teamwork, leadership, and emotional intelligence, Mike draws on more than 18 years' experience working with top teams and organisations like Google and Microsoft, as well as his athletic career for the Kansas City Royals.

Please contact the library to request a loan of this book



[Boards that dare : how to future-proof today's corporate boards](#) (Book)

Marc Stigter, 2018

Corporate boards as fiduciaries are responsible for delivering maximum value and the highest standards of care. This book reveals a future-proofing opportunity for courageous boards to redefine value and care for employees, consumers, communities, society, the environment, and shareholders.

Please contact the library to request a loan of this book

On a grey winter day in December 1958, one of the deadliest fires in American history took the lives of ninety-two children and three nuns at a Catholic elementary school on Chicago's West Side. In *To Sleep with the Angels*, two veteran journalists tell the moving story of the fire and its consequences.

Please contact the library to request a loan of this book



Fire Journal – December 2020 issue is out and available online. Read a selection of articles on the science, policy, and technology of vegetation fires and how they interact with communities and the environment right across the globe. Use this [MDPI link](#) to read the issue online.

FIRE FIGHTING

Leading During Today's Massive Wildfires (Magazine article)

Fire Engineering, December 2020

In the article, the author discusses how firefighters can effectively lead in the response against wildfires by citing his experiences in leading his team to control the River and Ranch Fires in Mendocino County, California in 2018. Topics include the importance of preparing firefighters and team members prior to the fire season, communicating the location of the fire, maintaining mobility, and knowing the geographical areas of responsibility.

Please contact the library to request a copy of this article.

FIRE BEHAVIOUR

How heatwaves and drought combine to produce the perfect firestorm (News article)

The Conversation, 29 January 2021

Long heatwaves during entrenched drought often trigger fears of bushfire. The unprecedented Black Summer bushfires marked the end of 2019, Australia's warmest and driest year on record. While we know heatwaves and drought make fires worse, the details are poorly understood. This is what the new research investigated.

Read the news article online using [The Conversation link](#). The research article 'Modulating influence of drought on the synergy between heatwaves and dead fine fuel moisture content of bushfire fuels in the Southeast Australian region' can be read online using this [Weather and Climate Extremes journal link](#)

The influence of soil moisture on surface and sub-surface litter fuel moisture simulation at five Australian sites (Journal article)

TRAINING AND PROFESSIONAL DEVELOPMENT



[Millennials, goldfish & other training misconceptions](#) (Book)

Clarke Quinn, 2018

Now, myth busting has never been easier. This book debunks more than 30 common assumptions of good learning design to help you avoid wasting time, resources, and goodwill on unproven practices. Drawing on cognitive psychology and brain science, Clark arms you with the ammo to challenge the claims you're likely to hear from peers and co-workers.

Please contact the library to request a loan of this book

HEALTH AND SAFETY



[The ways of the bushwalker : on foot in Australia](#) (Book)

By Melissa Harper, 2020

Australians have always loved to step out in nature, whether off-track or along a marked route. Over time, walking for the sake of walking became the dominant motive. Walking clubs proliferated, railways organised mystery hikes attended by thousands, and Paddy Pallin established his equipment business, this landmark book, now updated, reveals how the ordinary act of walking can become extraordinary.

Please contact the library to request a loan of this book

Wildland firefighter exposure to smoke and COVID-19: A new risk on the fire line (US Journal article)

Science of The Total Environment, Vol 760, March 2021

Wildfire incidents can be an ideal environment for the transmission of infectious diseases, particularly for wildland firefighters who congregate in work and living settings. In this review, we examine how exposure to wildfire smoke can contribute to an increased likelihood of SARS-CoV-2 infection and severity of coronavirus disease (COVID-19).

Use this [Science Direct link](#) to read the article online.



Men's Health and Women's Health – January/February 2021 issues are out and in our online magazine collection.



Contact the library for the password embedded link to access our eMagazines.

Agricultural and Forest Meteorology, Vol 298–299, Mar 2021

Fuel moisture content (FMC) of the litter is a critical factor determining fire ignition and spread and is an important input for most fire behaviour prediction models. Soil moisture below the litter layer has been shown to influence litter FMC, but few models explicitly consider its effect. This study aimed to evaluate how soil moisture content may affect litter FMC.

Please contact the library to request a copy of this article.

Experiments on the influence of spot fire and topography interaction on fire rate of spread *(Journal article)*

PLOS ONE, January 2021

Spotting is thought to increase wildfire rate of spread (ROS) and in some cases become the main mechanism for spread. The authors' findings suggest that under certain topographic conditions, spot fires can allow a fire to overcome the low spread potential of downslopes. Current models may underestimate wildfire ROS and fire arrival time in hilly terrain if the influence of spot fires on ROS is not incorporated into predictions.

Use this [PLOS ONE link](#) to read the article online.

Wildfire smoke is more cooling on climate than computer models assume *(ScienceDaily news article)*

University of Wyoming, 12 January 2021

A study of biomass burning aerosols led by University of Wyoming researchers revealed that smoke from wildfires has more of a cooling effect on the atmosphere than computer models assume.

Use this [ScienceDaily link](#) to read the article online.

Wildfire risk rising as scientists determine which conditions beget blazes *(ScienceDaily news article)*

DOE/Pacific Northwest National Laboratory, 8 December 2020

As wildfires burn more often across the Western U.S., researchers are working to understand how extensively blazes burn. Their investigation, aided by machine learning techniques that sort fires by the conditions that precede them, not only reveals that the risk of wildfire is rising, but also spells out the role moisture plays in estimating fire risk.

Use this [ScienceDaily link](#) to read the article online.

FIRE MANAGEMENT

Spatial Analysis, Interactive Visualisation and GIS-Based Dashboard for Monitoring Spatio-Temporal Changes of Hotspots of Bushfires over 100 Years in New South Wales, Australia *(Journal article)*

Buildings Vol 11 no 2, 2021

Sub-Clinical Effects of Outdoor Smoke in Affected Communities *(Journal article)*

International Journal of Environmental Research and Public Health, Vol 18, no 3 2021

Many Australians are intermittently exposed to landscape fire smoke from wildfires or prescribed burns. This study aimed to investigate effects of outdoor smoke from planned burns, wildfires and a coal mine fire by assessing biomarkers of inflammation in an exposed and predominantly older population. Participants were recruited from three communities in south-eastern Australia.

Use this [MDPI link](#) to read the article online.

MENTAL HEALTH & INCIDENT STRESS



[Moral challenges : vocational wellbeing among first responders](#) *(Book)*

Edited by Tom Frame, 2020

First responders are exposed to trauma at rates that are more than double that of the general population. This Australian book is an opportunity to explore issues around moral and psychological wellbeing within these roles that expose people to dangers on a daily basis. Each chapter was written by a different contributor, each with rich experience in research or leadership in the first responder community

Please contact the library to request a loan of this book

PTSD Clarity: We Are Resilient *(Magazine article)*

Fire Engineering, December 2020

In the article, the author discusses how first responders like firefighters can determine and properly respond to possible posttraumatic stress disorder (PTSD). Topics include the training given to responders to become resilient and skilled in responding to emergency situations, as well as the symptoms of PTSD and PTSD-like conditions like nightmares, headaches, and mood changes.

Please contact the library to request a copy of this article.

Self-Care and Emotional Wellness in the Fire Service. *(Magazine article)*

Fire Engineering, December 2020

The article discusses how firefighters can provide intentional self-care and emotional wellness to avoid experiencing conditions like chronic fatigue, complex post-traumatic stress disorder (PTSD) and burnout. Also cited are how self-care can allow firefighters to recover from traumatic events and experiences, and how they can avoid depression, substance abuse, suicidal ideation, and anger.

Please contact the library to request a copy of this article.

The 2019–2020 bushfire season is estimated to be one of the worst fire seasons on record in Australia, especially in New South Wales (NSW). The devastating fire season ignited a heated public debate on whether prescribed burning is an effective tool for preventing bushfires, and how the extent of bushfires has been changing over time. The objective of this study is to answer these questions, and more specifically to identify how bushfire patterns have changed in the last 100 years in NSW. Use this [MDPI link](#) to read the article online.

Pre-season fire management planning: the use of Potential Operational Delineations to prepare for wildland fire events (*Journal article*)
International Journal of Wildland Fire, published online 16 December 2020

US fire scientists are developing Potential Wildfire Operational Delineations, also known as ‘PODs’, as a pre-fire season planning tool to promote safe and effective wildland fire response, strengthen risk management approaches in fire management and better align fire management objectives. PODs are a collaborative planning approach based on spatial analytics to identify potential wildfire control lines and assess the desirability of fire before ignition.

Please contact the library to request a copy of this article.

FIRE INVESTIGATION

Fire Investigation Basics (*Magazine article*)
Fire Engineering, January 2021

The article discusses that investigating a fire or an explosion can be extremely time-consuming, arduous, complex, and challenging. It mentions that fire investigators (FIs) are called to scenes ranging from basic food on the stove fires to multiple fatalities and possibly murders.

Contact the library to request a copy of this article. If you would like to receive the latest issue of *Fire Engineering* delivered to your email address, please ask the library.

HAZARD REDUCTION AND PRESCRIBED BURNING



A guide to the Prescribed Burning Atlas
(*YouTube Video: 40 mins*)
Centre of Excellence for Prescribed Burning, 11 Dec 2020

The Prescribed Burning Atlas is a decision support tool for prescribed burning risk assessment. It explores the influence of different prescribed burning treatments on a

Books on this topic are found in our library's [Mental Health and You collection](#)

COMMUNITY RESILIENCE



Firewise, fire-safe : how to survive a bushfire
(*Book*)

Richard Whitaker, 2020

This updated edition helps you prepare for a bushfire and advises on what to do when a fire threatens you and your home. There is preparation information for when the fire approaches, when the fire arrives and after the fire. First aid is approved by St John Ambulance and there is a list of emergency contacts. Please contact the library to request a loan of this book

Disaster season is here — do you have a Resilience Action Plan? Here's how the small town of Tarnagulla built theirs (*News article*)

The Conversation, 18 January 2021

We can't prevent hazards or climate change-related extreme weather events but we can prepare for them — not just as individuals but as a community. One way to do that is develop what is known as a resilience action plan, or RAP. Recent work with Tarnagulla — a small town that sits in a bushfire and heatwave-prone part of rural Victoria — offers an example.

Read the news article online using [The Conversation link](#)
The final report about the Tarnagulla Community Resilience Action Plan is available [here](#)

COMMUNITY ENGAGEMENT



Supplementing emergency warning messages to encourage readiness to act: the effect of colours and icons (*Report*)

BNHCRC, January 2021

Current Australian emergency warning messages that have been refined to match evidence-based practice strongly encourage community members' readiness to act on emergency instructions. An online survey was conducted in which participants were exposed to one of 16 mock emergency warnings about either a bushfire or a riverine flood and were then asked a series of questions relating to their demographic characteristics, message comprehension and effectiveness, threat appraisal, coping appraisal, etc. Use this [BNHCRC link](#) to download the report.

NATURAL ENVIRONMENT

range of risks. The Atlas provides an ability for users to understand the likely cost, benefits and overall risk reduction for landscapes across south-eastern Australia. Use this [YouTube link](#) to watch the video online. To access the Atlas use this [link](#) and the Bushfire and Natural Hazards CRC Hazard Note that provides more detail on the research methods can be found [here](#)

EQUIPMENT

Engineering A Safer Crew Protection System (Magazine article)
Wildfire, November 2020

Burn-over crew protection systems have been installed into fleets of rural wildland Fire-Fighting Vehicles (FFVs) in parts of Australia, successfully providing protection for crews in recent large fires. Research out of the Country Fire Authority (CFA) in Victoria is leading the change in vehicles carrying more than 1000 litres of water. Read the article online using this [IAWF link](#).

A better fit (Podcast: 32 mins)
NFPA, 12 January 2021

There are more than 90,000 female firefighters in the United States, and nearly all of them wear personal protective equipment that was designed for a man. Many women report that their gear doesn't fit, which can lead to injuries and discourage women from entering the fire service. Listen to a researcher who is studying how ill-fitting PPE impacts female firefighters and also a fire captain in Michigan about her first-hand experience with the problems caused by ill-fitting gear. Listen to the podcast using this [NFPA link](#).

AVIATION AND DRONES



Air Attack – Issue 13 2020 issue is out and available online. Read a selection of articles on the dangers of turbulence, the NZ Ohau Village fire, and the extra burdens of those who fight fires at the urban interface.

Use this [KiaKaha Media link](#) to read the issue online.

Quantifying merging fire behaviour phenomena using unmanned aerial vehicle technology (Journal article)
International Journal of Wildland Fire, published online 10 December 2020

The aim of this study was to develop a simple, fast and accurate method to track fire front propagation using emerging technologies to quantify merging fire behaviour at the field scale. Medium-scale field experiments were conducted during April 2019 on harvested wheat fields in western Victoria, Australia. An unmanned aerial vehicle

Extent and effect of the 2019-20 Australian bushfires on upland peat swamps in the Blue Mountains, NSW (Journal article)

International Journal of Wildland Fire, published online 22 January 2021

The devastating bushfires of the 2019–20 summer are arguably the most costly natural disaster in Australian recorded history. What is little known is that these fires severely affected the temperate highland peat swamps on sandstone (THPSS), a form of upland wetland that occurs in the water supply catchments of Sydney in the Greater Blue Mountains World Heritage Area and National Park. The authors present an analysis of the spatial extent and severity of the bushfire on the THPSS.

Please contact the library to request a copy of this article.



Bushfire Recovery Project Reports

Australian National University and Griffith University, 2020

This series of reports aim to present the latest evidence from the peer-reviewed scientific literature about bushfires, climate change and the native forests of southern and eastern Australia. They have adjoining easy 'fact sheets' with the more detailed reports underpinning the assessments.

Report 1: How does climate affect bushfire risks in the native forests of south-eastern Australia?

Report 2: What Are The Relationships Between Native Forest Logging And Bushfires?

Read the reports online using this [link](#).

VOLUNTEER MANAGEMENT

'Spontaneous' volunteers? Factors enabling the Student Volunteer Army mobilisation following the Canterbury earthquakes, 2010–2011 (Journal article)

International Journal of Disaster Risk Reduction, Vol 53, February 2021

'Spontaneous' volunteers have long been recognized for the distinct and important contribution they can have within disaster response and recovery. The emergence of the Student Volunteer Army (SVA) has featured as a success story of crisis volunteerism in international disaster response literature and as a potential blueprint for youth-centred post-disaster civic action.

Please contact the library to request a copy of this article.

CHILDREN'S BUSH FIRE COLLECTION



The day she stole the sun (Book)
By Cobargo Public School Year 5 & 6 students, 2020

was used to capture high-definition video imagery of fire propagation.

Please contact the library to request a copy of this article.

LAND USE AND MANAGEMENT

Disaster Risk Reduction in Bushfire Prone Areas: Challenges for an Integrated Land Use Planning Policy Regime (Journal article)

Sustainability, Vol 12 no 24, 2020

In Australia, the importance of integrating bushfire management and land use planning systems is a growing priority as bushfire risk in urbanised areas increases. This paper examines the changing policy landscape towards an integrated DRR regime for land use planning and bushfire management in south-west Western Australia.

Use this [MDPI link](#) to read the article online.

METEOROLOGY AND CLIMATE CHANGE



[The climate cure : solving the climate emergency in the era of COVID-19](#) (Book)

Tim Flannery, 2020

Emergencies test governments, organisations and individuals. In *The Climate Cure* renowned climate scientist Tim Flannery takes aim at those responsible for the campaign of obfuscation and denial. Flannery demands a new approach, based on the nation's response to COVID-19, that will lead to effective government policies. *The Climate Cure* is an action plan for our future. *Please contact the library to request a loan of this book*

Lessons Learned from Coupled Fire-Atmosphere Research and Implications for Operational Fire Prediction and Meteorological Products Provided by the Bureau of Meteorology to Australian Fire Agencies

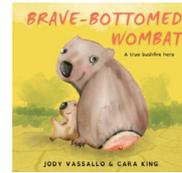
Atmosphere, Vol 11 no 12, 2020

Coupled fire-atmosphere models are simulators that integrate a fire component and an atmospheric component, with the objective of capturing interactions between the fire and atmosphere. The Bureau of Meteorology is responsible for providing relevant and accurate meteorological information to Australian fire agencies. This paper discusses the operational use of fire predictions and simulators, learnings from CFA models and potential future directions for the Bureau in using CFA models to support fire prediction activities.

Use this [MDPI link](#) to read the article online.

When bushfires ripped through Cobargo in the early hours of the morning on New Year's Eve, some lost houses, others lost family members and all have a story to tell about that day. Together, along with the help of their teacher Campbell Kerr, Cobargo Public's Year Five and Six class have told their story – writing and illustrating a book titled 'The Day She Stole the Sun.'

Please contact the library to request a loan of this book



[Brave-bottomed wombat : a true bushfire hero](#) (Book)

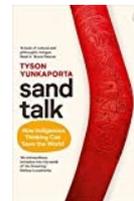
By Jody Vassallo & Cara King, 2020

This story was written to help children process their feelings around the fires. It acknowledges that the animals too felt the fear they experienced, it explains how they got through those smoke filled days and how they gathered together to support each other. The story tells how humans found them and helped them fix their wounds and return them to the homes.

Please contact the library to request a loan of this book

More books in our children's bush fire collection can be found listed [here](#)

GENERAL



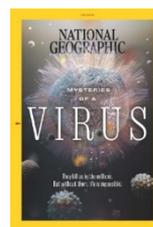
[Sand talk : how Indigenous thinking can save the world](#) (Book)

Tyson Yunkaporta, 2019

This book is about everything from echidnas to evolution, cosmology to cooking, sex and science and spirits to Schrödinger's cat.

Tyson Yunkaporta looks at global systems from an Indigenous perspective. He asks how contemporary life diverges from the pattern of creation. How does this affect us? How can we do things differently? *Sand Talk* provides a template for living.

Please contact the library to request a loan of this book



National Geographic – February 2021 issue is out and in our online magazine collection. Read about the necessity of traveling, volcanoes sparking lightning, the world of viruses, and the migration of women *Contact the library for the password embedded link to access our eMagazines.*



Explaining extreme events in 2019 from a climate perspective (Report)

Bulletin Of The American Meteorological Society, January 2021

This BAMS special report presents assessments of how human-caused climate change may have affected the strength and likelihood of individual extreme events. It features the research of 77 scientists from 7 countries.

Use this [BAMS link](#) to read the report online.



Weather, climate & catastrophe insight: 2020 annual report (Report)

Aon Benfield, January 2021

This report evaluates the impact of the disasters and extreme weather events that occurred worldwide during 2020 and provides an overview of global economic losses. The report is designed to help identify trends, enhance risk mitigation, transfer risk, and build resilience.

Use this [AON link](#) to read the report online.

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