



NSW Rural Fire Service Library

New books, articles and reports in your library this month

This month's new additions includes books, reports and articles that cover bushfires and PTSD, climate change and natural hazards, US wildland firefighter burnover fatalities, SparkCloud modeling, ember attack in bushfire risk assessment, the new Deep Time Dreaming book, and wildlife electrocution and fires, a children's book on Nancy Bird-Walton, plus more additions to our Search and Rescue collection and our compilation of Women and Success titles. The library also now owns several copies of the recent DVD release – Only the Brave.

Contact your librarian Katie to borrow any of the books and DVDs or to request articles at rfs.library@rfs.nsw.gov.au



School holidays – take home a book to amuse the children (and please bring it back)

The NSW RFS Library has a growing collection of literature of juvenile fiction and picture books that focus on bushfires for younger readers. A list of titles is available on the Children's Bush Fire Collection [library page](#). Commonly used by schools, brigades and children's nurseries, the library is delighted for members to borrow the books as well. Just [contact the library](#) to borrow any of the titles.

FIRE INCIDENTS – AUSTRALIAN



Raising hope out of ashes of the Tathra bushfire (CSIRO article)

ECOS, Issue 241, March 2018

A bushfire and ember storm fanned by raging winds across the coastal escarpment brought devastation to Tathra, destroying 65 houses and 35 caravans or cabins on Sunday 18 March. At Tathra, in the week after the fire, RFS officers and the CSIRO team used the Bushfire House Surveyor app to collect more detailed, spatial (or geo-positioned) data about building design, local vegetation, surrounding terrain and the degree of damage, as well as accounts from people that help us to better understand what happened.

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

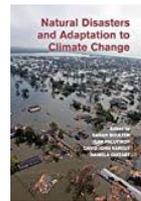
Life After Bushfire: Posttraumatic stress, coping, and posttraumatic growth (Pre-published journal article)

Australasian Journal of Paramedicine, March 2018

Research suggests that posttraumatic stress symptoms are common after the experience of bushfire. However, the ways in which individuals cope with, positively grow from,

EMERGENCY MANAGEMENT

[Natural disasters and adaptation to climate change](#) (Book)



This volume presents eighteen case studies of natural disasters from Australia, Europe, North America and developing countries. By comparing the impacts, it seeks to identify what moves people to adapt, which adaptive activities succeed and which fail, and the underlying reasons, and the factors

that determine when adaptation is required and when simply bearing the impact may be the more appropriate response. Includes chapters on the Black Saturday fires and flooding in Queensland.

Please contact the library to borrow this book.

Flood Management In A Changing Climate (Hazard Note)

BNHCRC, March 2018

Flooding is Australia's most expensive natural hazard and climate change will magnify risks. Recent floods suggest that Australia has limited capacity to manage even current risks. Hazard Note 47 highlights PhD research by Dr Caroline Wenger, who investigated mitigation

and find benefit in the adverse circumstances of bushfire in Australia, has not been adequately explored. The main objective of this study was to assess the relationships between posttraumatic stress, coping strategies, and posttraumatic growth in a sample of Australian community members affected by a bushfire event.

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

FIRE INCIDENTS – INTERNATIONAL



The latest issue of **Wildfire Magazine** (February 2018) is now available online. Wildfire is published by the International Association of Wildland Fire and offers an informal read on articles regarding wildfire, bushfire and all-risk management.

Use this [Wildfire Magazine link](#) to read the latest issue.



[Only the Brave](#) (DVD)

Based on the true story of the Granite Mountain Hotshots, a group of elite firefighters from Prescott, Arizona who risk everything to protect a town from a historic wildfire in Yarnell, Arizona in June 2013. The fire claimed the lives of 19 of their members.

The library also holds the books based on this tragic incident - [My lost brothers : the untold story by the Yarnell Hill Fire's lone survivor](#) and [On the burning edge : A fateful fire and the men who fought it](#).

Please contact the library to borrow the DVD or books.



[The big burn : Teddy Roosevelt and the fire that saved America](#) (Book)

Timothy Egan, 2011
On an August afternoon, 1910, wind moved through the drought-stricken national forests of Washington, Idaho, and Montana,

whipping hundreds of small blazes burning across the forest floor into a roaring inferno. Forest rangers had assembled nearly ten thousand men to fight the fire. Egan narrates the struggles of the overmatched rangers against the implacable fire. Equally dramatic is the larger story he tells of president Teddy Roosevelt and his chief forester, Gifford Pinchot, pioneering the notion of conservation.

Please contact the library to borrow this book.

Wildfires set to increase: could we be sitting on a tinderbox in Europe? (Online news)

Science Daily, 7 March 2018, European Commission, Joint Research Centre (JRC)

strategies used overseas to see which strategies could best be adapted in Australia.

To read this Hazard Note online, please use this [link](#).

Data and decision-making potential in Fire and Rescue Services (Online blog)

Crisis Response, Feb 2018

Technology and standard tested personal protective equipment, which would have been considered science fiction not long ago, are now commonplace. However, in the UK, some of today's training and operational practices would be instantly recognisable to the firefighters of 1947. Awareness of how technology can make a significant difference to emergency management – at all levels – is being embraced by FRS around, as well as partner agencies, in many countries.

Use this [Crisis Response link](#) to read the blog online.

SEARCH AND RESCUE

[Vehicle extrication techniques](#) (Book)

Holmatro, 2012

This book has been written for rescuers of all levels of experience, to be used as a resource and a basis for training and development. The aims of the book are to: - Promote a safe and systematic approach to the rescue of persons who are trapped following a road traffic collision - Explain the concept of extrication planning - Explain techniques that may be used during the extrication process - Introduce the rescuer to some key basic medical considerations.

Please contact the library to borrow this book.



Equine emergency rescue : a guide to large animal rescue (Book)

MaryAnne Leighton & Michelle Staples, 2015

Equine Emergency Rescue is written for horse owners, emergency responders, equine vets, RSPCA and stock inspectors, race course vets and barrier staff and anyone else who works with horses. This book shows them step-by-step instructions and reassures them that using these steps will increase their own safety and that of the horse in a rescue situation.

Please contact the library to borrow this book.

[Lost person behavior : a search and rescue guide on where to look for land, air, and water](#) (Book)

Robert J. Koester, 2008

As the world gets warmer and Europe's land gets drier, fires are set to get even worse. Even relatively safe Alpine mountain regions will see a rapid increase in fire danger unless action is taken to limit climate change and reduce the main causes for wildfires starting and spreading. These warnings come from a JRC study of factors affecting fire danger across the continent.

Use this [ScienceDaily link](#) to read the news article online. Would like to read more...this news article relates to the JRC report "Forest fire danger extremes in Europe under climate change" as cited below.



Forest fire danger extremes in Europe under climate change (Online report)
Joint Research Centre (European Commission), 2018

Forests cover over a third of the total land area of Europe. In recent years, large forest fires have repeatedly affected Europe, in particular the Mediterranean countries. Fire danger is influenced by weather in the short term, and by climate when considering longer time intervals. In this work, the emphasis is on the direct influence on fire danger of weather and climate.

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

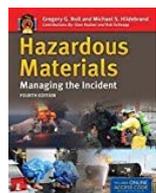
FIREFIGHTING



Australian Flammability Monitoring System (AFAC Webinar)

A new AFAC webinar, which explores the Australian Flammability Monitoring System, is now available on YouTube. The system has been developed from Bushfire and Natural Hazards CRC research to support fire risk management and response activities such as hazard reduction burning and pre-positioning of firefighting resources.

View this webinar online using this [YouTube link](#).



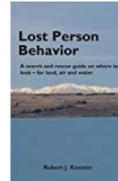
Hazardous materials : managing the incident (Book)

Now in its fourth edition, this text is widely used by firefighters, hazmat teams, bomb squads, industrial emergency response teams, and other emergency responders

who may manage unplanned hazardous materials incidents.

Please contact the library to borrow this book.

[Fireground strategies \(Book\)](#)



Based upon a landmark study, this book is the definitive guide to solving the puzzle of where a lost person might be found. Nowhere else is it possible to learn about the latest subject categories, behavioural profiles, suggested initial tasks, and specialised investigative questions.

Whether the subject is underground, underwater, under collapsed rubble, on land or has fallen from the sky, this book delivers what search managers need.

Please contact the library to borrow this book.

More books, websites and manuals on this topic are found on our library webpage [Search and Rescue Resources](#).

LEADERSHIP AND MANAGEMENT

"Yes, sir": Leadership and blind obedience in hierarchal organisations (Journal article)

International Journal of Emergency Services, Vol 7 no 1, 2018

The purpose of this paper is to explore human issues within subordinate and leader interaction and guide police leaders in how they can achieve success. Although focussed on uniformed services, leaders from all areas will find the arguments presented here useful.

Please contact the library to request a copy of this article

NSW RFS Staff may use this [Emerald link](#) to access the article at work



Why purpose matters : and how it can transform your organisation (Book)

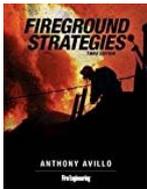
Each of us has a desperate yearning for meaning and purpose but very few of us find it or are able to live it out in the organisations we work for. Nine CEOs have shared in this

book how purpose has, or is expected to, transform their organisation, motivate employees, build sustainable competitive advantage and deliver greater organisational capacity and shareholder return over the long term.

Please contact the library to borrow this book.

WOMEN AND SUCCESS

[In praise of difficult women : life lessons from 29 heroines who dared to break the rules \(Book\)](#)



Anthony Avillo, 2015

The third edition of US Fire Chief Anthony Avillo's bestselling *Fireground Strategies* is an invaluable resource for the education and development of outstanding fire officers.

Through case studies and illustrative examples, Avillo covers how to identify a strategy, develop an action plan, and implement tactics to meet the objectives of the course of action on a fireground.

Please contact the library to borrow this book.

Fuel and topographic influences on wildland firefighter burnover fatalities in Southern California (*Journal article*)

International Journal of Wildland Fire, March 2018

Locations of past fatal firefighter burnovers coupled with a machine-learning algorithm were used to identify and characterise the environmental variables that contribute to the likelihood of a fatal burnover in Southern California. Steep, south-west-oriented slopes located in canyons that have a shrub fuel type were found to be the most dangerous locations for firefighters.

Please contact the library to request a copy of this article



[Pumping and aerial apparatus driver/operator handbook](#) (*Book*)

IFSTA, 2015

The updated 3rd edition offers aerial apparatus safety emphasising the most common risks based on actual incidents, hydraulic calculations presented in a logical sequence making teaching and learning easier, and strategy and tactics that include assessing rescue priorities specifically for aerial placement and deployment.

Please contact the library to borrow this book.

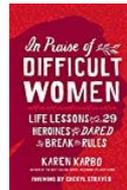
An Australian firefighter's 9/11 story (*Podcast*)

ABC Radio Conversations, March 2018

Andrew Wallace is a senior firefighter with the Western Australian Fire and Rescue Service. On September 11, 2001, he watched the attacks on New York's World Trade Centre on television. He could see New York firefighters would be called on to work in extraordinarily dangerous conditions. Within days, Andrew caught a flight to New York to see if he could help. Working in the rubble of the destroyed skyscrapers, he formed a powerful bond with his fellow rescue workers.

Listen to the podcast at this [ABC link](#).

FIRE BEHAVIOUR



From Frida Kahlo and Elizabeth Taylor to Nora Ephron, Carrie Fisher, and Lena Dunham, this witty narrative explores what we can learn from the imperfect and extraordinary legacies of 29 iconic women who forged their own unique paths in the world. Smart, sassy, and unapologetically feminine, this book is an ode to the bold and charismatic women of modern history.

Please contact the library to borrow this book.



[Stop fixing women : why building fairer workplaces is everyone's business](#) (*Book*)

Catherine Fox, 2017

This book argues that insisting that women fix themselves will not fix the system, the system built by men. Catherine Fox's book is an important tool for male leaders who say they want to make a difference. She issues a challenge, showing how business, defence, public service and community leaders might do it, rather than just talk about it. The book also looks at the Australian Male Champions of Change programme.

Please contact the library to borrow this book.



[Kicking off : how women in sport are changing the game](#) (*Book*)

Sarah Shephard, 2016

Women in sport are fighting for equality with more vigour than ever, but are they breaking down the barriers that stand in their way? The book looks behind the headlines to see whether progress is really being. Includes contributions from women involved in sport at the highest level, including Chrissie Wellington, Maggie Alphonsi, Kelly Smith and Nicole Cooke, who reveal their personal experiences of being at the top of their game.

Please contact the library to borrow this book.

More books on this topic are found in our library's [Women and Success online bibliography](#).

HISTORY



[Deep time dreaming : uncovering ancient Australia](#) (*Book*)

Billy Griffiths, 2018

This book investigates a twin revolution: the reassertion of Aboriginal identity in the second half of the twentieth century, and the



fire

Fire is an international open access journal, only available electronically, about the science, policy, and technology of vegetation fires, and how they interact with communities and the environment.

If you would like to receive a notification when each bi-annual issue is published, [email the library](#) and I will add you to the alert.

Vol 1, no 1, June 2018 articles are available online [here](#).

An analysis of the effect of aspect and vegetation type on fine fuel moisture content in eucalypt forest (*Journal article*)

Alen Slijepcevic, Wendy R. Anderson, Stuart Matthews and David H. Anderson

International Journal of Wildland Fire, March 2018

The effect of aspect and vegetation structure on the fine fuel moisture content of different fuel strata was investigated. The effect of the percentage of fuel available for burning and when top litter moisture content fell into categories associated with severe fire behaviour and fire management planning was further discussed.

Please contact the library to request a copy of this article

Incorporating ember attack in bushfire risk assessment: a case study of the Ginninderry region (*Conference paper*)

22nd International Congress on Modelling and Simulation, December 2017

Current methods for assessing the risk of bushfire to built structures are based on the assumption that the majority of structure loss is due to radiant heat exposure. However, data collected in the aftermath of recent destructive bushfires indicates that the impacts of radiant heat are insignificant compared to the impact of ember attack. This paper employs the ember load model to incorporate ember attack into bushfire risk assessment. In particular, the authors consider the case of the Ginninderry region, which is a tract of land currently subject to rezoning for urban development.

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

FIRE MANAGEMENT

Strengthening Fire Mapping For Improved Fire Management And Carbon Abatement In North Australia (*Hazard Note*)

BNHCRC, March 2018

uncovering of the traces of ancient Australia. It explores what it means to live in a place of great antiquity, with its complex questions of ownership and belonging.

Please contact the library to borrow this book.

MENTAL HEALTH

A need to help: stories of emergent behaviour from the scene of accident" (*Journal article*)

International Journal of Emergency Services, March 2018

The purpose of this paper is to investigate how spontaneous volunteers make sense of their actions at the scene of accident. More specifically, this paper focusses on the moral aspects of this sense-making process in terms of how spontaneous volunteers justify their own and others actions at the scene of accident.

Please contact the library to request a copy of this article

NSW RFS Staff may use this [Emerald link](#) to access the article at work

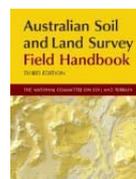
NATURAL ENVIRONMENT

Wildfires as collateral effects of wildlife electrocution: An economic approach to the situation in Spain in recent years (*Journal article*)

Science of The Total Environment, June 2018

The interaction between wildlife and power lines has collateral effects that include wildfires and Carbon Dioxide (CO₂) emissions. However, currently available information is scarce and so new approaches are needed to increase our understanding of this issue. Here, we present the first analysis of wildfires and their incidence as a result of this interaction in Spain during the period 2000-2012.

Please contact the library to request a copy of this article



[Australian Soil and Land Survey Field Handbook](#) (*eBook*)

This handbook specifies methods, standards and terminology used in soil and land survey investigations related to practical problems of land use and the scientific study of land

and soil. It has been widely used and adopted as a standard throughout Australia.

This [title link](#) allows NSW RFS Staff to open the eBook directly when at work. Volunteers and for those wishing to use the eBooks at home, please [contact the library](#) for a password-embedded link.

Hazard Note 46 covers research that is increasing the accuracy of fire severity mapping across northern Australia, leading to better land management outcomes. This research compares past and present fire regimes across the north to better understand the effects of various fire management practices.

To read this Hazard Note online, please use this [link](#).

Where you stand depends on where you sit: qualitative inquiry into notions of fire adaptation (Journal article)
Ecology and Society, Vol 22, no 3, 2017

Wildfire and the threat it poses to society represents an example of the complex, dynamic relationship between social and ecological systems. Increasingly, wildfire adaptation is positioned as a pathway to shift the approach to fire from a suppression paradigm that seeks to control fire to a paradigm that focuses on “living with” and “adapting to” wildfire. In this study, we seek insights into what it means to adapt to wildfire from a range of stakeholders whose efforts contribute to the management of wildfire.

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

COMMUNITY ENGAGEMENT

The safe tweet: social media use by Ontario fire services (Journal article)

International Journal of Emergency Services, March 2018

The purpose of this paper is to examine how Canadian fire services use social media to educate the public about safety and fire prevention.

Please contact the library to request a copy of this article

NSW RFS Staff may use this [Emerald link](#) to access the article at work

A framework for disaster resilience education with homeless communities (Journal article)

Disaster Prevention and Management: An International Journal, Vol 27, no 2, 2018

The purpose of this paper is to propose a practice framework for disaster resilience education (DRE) with homeless communities. Locally relevant risk information and material supports, together with sharing stories and eliciting values were important considerations for developing DRE content. Preferred delivery methods were outreach to build on trusted relationships and existing services, together with written material in large font emphasising images.

Please contact the library to request a copy of this article

HEALTH AND SAFETY

Soils study key to tracing PFAS leaching (CSIRO article)
ECOS, Issue 241, March 2018

Per- and polyfluoroalkyl substances or PFASs, created in the 1940s and including PFOA and PFOS are particularly known for use in fire-fighting foams. However, since the 2000s, it's been recognised that in seeking to solve one problem, we created another: a recognised bio-accumulative contaminant that is very persistent in the environment. The first exhaustive audit of peer-reviewed research on the behaviour of PFAS in soils has highlighted the urgent need for more focused investigation to decode how long-chain, and the short-chain PFASs created to replace them, move through soils and leach into the environment.

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



Quad bike safety - Consultation Regulation Impact Statement (Online report)

Australian Competition and Consumer Commission, March 2018

Quad bikes and SSVs are heavily utilised in Australian forestry and agricultural industries.

For many farmers, quad bikes and SSVs are affordable and used almost every day. They are also becoming increasingly popular in recreational and sporting settings. The impact of the deaths and injuries attributed to the operation of quad bikes in Australia is substantial. The ACCC has prepared this Consultation Regulation Impact Statement (Consultation RIS) to examine the case for government intervention to reduce the risk of death and injury associated with the use of quad bikes and SSVs in Australia.

Please use this [ACCC link](#) to read the report online



The CSIRO total wellbeing diet : complete recipe collection (Book)

This scientifically proven healthy eating plan, developed by Australia's CSIRO, is not just another diet. With over 400 delicious recipes compiled from previous CSIRO recipes collections, this book contains great-tasting dishes that will help you lose weight and boost your vitality while enjoying the pleasures of good food.

Please contact the library to borrow this book.

NSW RFS Staff may use this [Emerald link](#) to access the article at work

COMMUNITY RESILIENCE

Assessing influences on social vulnerability to wildfire using surveys, spatial data and wildfire simulations (Journal article)

Journal of Environmental Management, Vol 213, May 2018

A growing body of research focuses on identifying patterns among human populations most at risk from hazards such as wildfire and the factors that help explain performance of mitigations that can help reduce that risk. The research presented here utilises self-reported surveys, GIS data, and wildfire simulations to test the relationships between select perceptual, demographic, and property characteristics of property owners against empirically simulated metrics for potential wildfire related damages or exposure. The authors also evaluate how those characteristics relate to property owners' performance of mitigations or support for fire management.

Please contact the library to request a copy of this article

METEOROLOGY AND CLIMATE CHANGE

[Interpret and analyse fire weather information](#) (Book)

AFAC, 2017

Researchers, end users and training experts have joined forces through AFAC to develop a new, national evidence-based fire weather learning and training resource for emergency services. A project team from AFAC's Predictive Services Group, including representatives from the Bureau of Meteorology (BoM), collaboratively developed Interpret and Analyse Fire Weather Information. The finished learner resource (PUAFIR414) is part of the Public Safety Training Package for the sector.

Please contact the library to borrow this book.

Historians to climate researchers: Let's talk (Online news) *Science Daily, 19 March 2018*

Ours is not the first society to be confronted by massive environmental change. Over the course of history, some societies have been destroyed by natural disasters, like Pompeii, while others have learned how to accommodate floods, droughts, volcanic eruptions and other natural

REMOTE SENSING

SparkCloud: A Cloud-Based Elastic Bushfire Simulation Service (Journal article)

Remote Sensing Vol 10, no 1, 2018

The accurate modeling of bushfires is not only complex and contextual but also a computationally intensive task. Ensemble predictions, involving several thousands to millions of simulations, can be required to capture and quantify the uncertain nature of bushfires. During emergency situations, the user may need to make time-critical decisions that require the execution of bushfire-spread models within a deadline. Currently, most operational tools are not flexible and scalable. In this paper, we propose the SparkCloud service handles the computation requirements.

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

CHILDREN'S BOOKS



[Meet... Nancy-Bird Walton](#) (Book)

Our waterbombing DC-10 Very Large Air Tanker is the namesake of Australia's first female commercial pilot, Nancy Bird Walton. A beautifully

illustrated children's book, this details Nancy growing up during the golden age of aviation, studying under the famous aviator Charles Kingsford Smith.

Please contact the library to borrow this book.

[Ash Road](#) (Book)

Ivan Southall, 1965 (2013 reprint)



It's hot, dry and sweaty on Ash Road, where Graham, Harry and Wallace are getting their first taste of independence, camping, just the three of them. When they accidentally light a bushfire no one would have guessed how far it would go. The best-selling classic

Ash Road is an action-packed adventure story, so evocative of rural Australia you can taste the Eucalyptus, and received the Awards Winner 1966 Children's Book Council of Australia for Book of the Year and Winner 1966 New York Times Book Review for Children's Book of the Year.

hazards. The key is how a society plans for and interacts with the stress from nature.

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

Geoengineering risks losers as well as winners for climate and wildfire risks *(Online news)*

Science Daily, 9 April 2018

Artificially altering the climate system to limit global warming to 1.5C could increase the risks of wildfires in some areas, new research by scientists at the University of Exeter and the Met Office Hadley Centre suggests.

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

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