

FIRE UPDATE

BUSHFIRE CRC NEWSLETTER OCTOBER 2013

VOLUNTEERS NEEDED FOR STUDY ON FIGHTING FIREFIGHTER FATIGUE

Bushfire CRC PhD student Grace Vincent from Deakin University is looking to recruit 50 firefighters from across Australia to gather important data on firefighters and sleep during multi-day deployments.

There is currently no data about the sleep length and quality that firefighters experience during multi-day deployments. This study is important in managing firefighter health and safety, while providing ongoing protection against bushfires.

Participating in the research is easy and it will not impair suppression tasks. Firefighters who take part in the study will need to:

1. Wear a wrist activity monitor for three days before a deployment, during

the deployment and three days after deployment. This allows sleep quality and quantity when actively deployed to be compared to an individual's usual sleep patterns.

2. Wear a shirt pocket monitor during fire suppression, to measure the amount of physical activity performed on the fireground.
3. Complete a sleep and work diary. This diary will give an indication of total sleep hours and perceived fatigue levels.

To find out more information or to express interest in participating in this vital research email Grace at gvincent@deakin.edu.au

TASMANIA WELCOMES BUSHFIRE AND NATURAL HAZARDS CRC

Tasmanian Minister for Police and Emergency Management David O'Byrne recently welcomed Tasmania's involvement in the Bushfire and Natural Hazards CRC.

Speaking at an event in Hobart with all Tasmanian participating agencies (right), Mr O'Byrne said the new CRC will conduct research that will make the community more disaster resilient, building on the work of the Bushfire CRC over the last decade.

"With an expanded focus including flood, storm, cyclone, tsunami, earthquake and other natural hazards, as well as bushfire, the new CRC will have a major impact on Tasmania's disaster readiness.

"Tasmanian agencies committed to supporting the new CRC include the



Tasmania Fire Service, Parks and Wildlife Service, State Emergency Service, Forestry Tasmania and the Department of Premier and Cabinet," Mr O'Byrne said.

ENGAGING WITH VOLUNTEERS IN THE WEST

The Bushfire CRC recently attended the Department of Fire and Emergency Services Western Australia annual volunteer conference in Perth.

Interest in the Bushfire CRC booth from volunteers across fire, rescue and emergency services over the two-day conference was

high. Many were aware of the research completed by the Bushfire CRC, but many were also introduced to the work for the first time. Awake, Smoky and Hot joint project leader Dr Sally Ferguson, from CQUniversity, was a keynote presenter at the conference.

CEO'S BLOG

GARY MORGAN



The Bushfire CRC seasonal bushfire outlooks, published twice a year before the start of the northern and southern Australian bushfire seasons, are key outputs from your Bushfire CRC. Based on the latest science from Bushfire CRC partners, including the Bureau of Meteorology and fire and land management experts, the outlooks are useful tools for fire and land management agencies, firefighters, media outlets and the public right around the country.

For agencies, the outlooks assist fire managers in their fire season preparations. They are a valuable insight on the expected fire season based on the latest science, so agencies can plan accordingly, ensuring the right resources are in the right place for the season ahead. This flows on to community safety preparations, and the information distributed by agencies and the media. We know that bushfires will occur every year, and to ensure that communities in fire-prone areas are prepared for fire, it is important to continually refine education and preparedness information.

Media interest in the outlooks is always high, and this gives us the opportunity to assist agencies to get their community safety messages out, helping residents prepare for bushfire.

PROMPTS FOR FINAL OUTPUTS

Most researchers are now putting together, or will soon be putting together, their final reports, *Fire Notes* and presentations.

The Bushfire CRC believes that these final materials need to communicate the substantial progress of the work, showcasing the research achievements to all Bushfire CRC partners.

To help clearly communicate the research findings, the below structure will assist. The Bushfire CRC is not asking anyone to rework things they have already done.

This outline can apply to the entire final report if authors wish, but certainly it must be used for the report executive summary, *Fire Note* and slide presentations. The percentage figures are an indication of how much space or time should be allocated to that section.

State of knowledge – 20%

- A summary of where the scientific (and agency) knowledge was at the start of the project.
- What was the challenge set out to address?

Progression of research – 10%

- Timeline and description of experiments and field research

- Data collection and analysis – were these methods used before or are they new? Why?

Research results – 35%

- What was found?
- How do the results compare to what was known?
- Any variations from research planned originally? Why?
- List outputs (*Fire Notes*, journal articles, conferences and presentations)

State of knowledge now – 35%

- How has the research contributed to the state of knowledge?
- Specifically, what is new – what was unexpected, what validated existing thinking, what challenges remain?
- What other research has informed thinking?
- Where to from here from a research perspective?
- How can this be applied?

Using this structure will help to clearly communicate the research findings.

Contact lyndsey.wright@bushfirecrc.com or nathan.maddock@bushfirecrc.com for help.

STUDENT BLOG

LYNDESEY WRIGHT



I had the privilege of participating in the professional development workshop

on psychological preparedness at our recent joint conference with AFAC. Designed to assist those who are undertaking research field work to better prepare themselves for the experience, the workshop was one of the best I have attended in my time with the Bushfire CRC. I came away with many different insights and practical tips that I plan to incorporate into any future pre-surveying briefings that I deliver.

One thing that really stuck me was the importance of recognising and being focused on the responsibility of being a researcher. The role of a researcher in that situation is to collect information that is valuable and pertinent to the research questions being explored. The most valuable return that we can give to those who are willing to talk to us is to provide quality information to increase understanding and inform policy and practice.

As I thought about this further, I reflected that the Bushfire CRC research program has collected a wealth of data over not just the past three years, but the last decade. Such data is a valuable resource and we must continue to use it wisely to honour those people who have so generously provide us with their time and experiences.

CHILDREN LEARN ABOUT HEALTH AND SAFETY RESEARCH

The Awake, Smoky and Hot project was featured on Channel Ten's *Scope* last month. Aimed at educating children about science, the episode was dedicated to fire science. Watch joint project leader Dr Brad Aisbett (right) from Deakin University explain how the research is helping firefighter health and safety on the [Channel 10 website](#).



IN BRIEF

ABUZZ ON SOCIAL MEDIA

The Bushfire CRC uses social media to get research information out, and has recently passed 1000 likes on Facebook, and 500 followers on Twitter. Sarah Grady from Moree in NSW was the 1000th person to like the Bushfire CRC Facebook page, and won a pack of Bushfire CRC goodies, including a Fire Note 101 book. Sarah is a member of the Moree Rural Fire Brigade and looks forward to sharing the research resources with her brigade. Make sure you don't miss anything and like the Bushfire CRC on [Facebook](#), and follow us on [Twitter](#).

CONGRATULATIONS

PhD student David Barton was recently awarded Group Bravery Citation from the Governor General of Australia for his role with the Marysville SES during Black Saturday. Congratulations to David.

Bushfire CRC student Jenni Raines has submitted her PhD. A student with the original student program, Jenni worked on firefighter hydration with Dr Brad Aisbett's group at Deakin University. During her studies, Jenni decided to become a firefighter based on her experiences in the sector, and has now achieved that position with the CFA.

Whilst completing her firefighting training, Jenni found time to complete her PhD – a fantastic effort.

JOURNAL FIRST

The Ecological Society of America journal, *Frontiers in Ecology and the Environment*, recently published a free online edition on prescribed burning in fire prone ecosystems around the world. The Bushfire CRC contributed to this significant issue, and Bushfire and Natural Hazards CRC CEO Dr Richard Thornton was a guest editor, along with Jeremy Russell-Smith from Charles Darwin University. View the entire journal for free on the [ESA website](#).