

FIRE UPDATE

BUSHFIRE CRC NEWSLETTER APRIL 2011

THREE SUBMIT RESEARCH AS PROJECTS REACH FINAL STAGES



Although the main body of research from the 2003-2010 program has finished, many of the remaining PhD student projects are in the final stages of submitting their theses. In the past month three students – Claire Johnson, Phil Zylstra and Jennifer Hollis – have submitted.

By the end of 2010, we had 22 students who had submitted their final thesis, and in the coming months we expect more. A *Fire Note* is published on each PhD project as it completes.

Claire Johnson submitted her thesis to La Trobe University. Her research was into how bushfire fighters think about worst-case scenarios – identifying what might go wrong during a fire with the aim of not being surprised by unexpected events and identifying possible actions to mitigate the consequences if the worst happens.

“A failure to consider worst-case scenarios has been implicated in a number of high-profile investigations into Australian bushfire disasters,” Claire says, adding that her findings “indicated that bushfire fighters inconsistently consider worst-case scenarios and identified a number of potential barriers to worst-case scenario thinking.”

Claire’s work is summarised in *Fire Note 77* and she talks about it in a series of video interviews, all available on the Bushfire CRC website.

Phil Zylstra’s thesis on Forest Flammability has just been approved without corrections



Claire Johnson



Jennifer Hollis

by the University of New South Wales at ADFA. Phil’s forest fire behaviour model is already partly in use by the NSW National Parks and Wildlife Service and the NSW Rural Fire Service. It is used, for example, to develop precision prescriptions for burning under trees in koala habitat, to identify ideal fire frequency to best assist suppression efforts in a diverse range of forests, and to create prescriptions for burning heathland to manage rare flightless birds.

The work of Bushfire CRC PhD scholar Jennifer Hollis at the University of New South Wales at ADFA, on predicting woody fuel consumption, was summarised in *Fire Note 76*. The ability to accurately predict woody fuel consumption during a fire is important for both forest and fire management. Information on woody fuel consumption in Australian southern eucalypt forest is scant and the predictive capacity of existing models unknown.

Jen’s work evaluated the predictive capacity of five existing models.

CEO’S BLOG

GARY MORGAN



FOUNDATIONS LAID FOR INSTITUTE

The proposal for an Australasian Fire Research Centre has been gaining momentum in recent months, with our Governing Board focused on laying the foundation work.

The idea of an Institute was raised and recommended by the 2009 Victorian Bushfires Royal Commission. It provides a once in a generation opportunity to develop a centre of global excellence in the practice of managing fire and related natural hazards.

Our environment is now more complex than when the Bushfire CRC began in 2003. Our partners have grown and cover a broader range of activities alongside fire, including managing the land all year round.

The Institute will bring together the best researchers from around Australasia and other countries in a coordinated and national research program. Like the Bushfire CRC, it is supported by all Australian and New Zealand fire and land management agencies, as well as leading universities and research organisations.

Importantly, the Institute will build on the depth of research undertaken by the Bushfire CRC with a broader and ongoing strategic focus on natural hazards. It will continue to ensure that this research is used by our partners, education providers and the community.

I encourage you to keep watching our website for more updates on the progress of the Institute. For Stakeholder Council representatives, a thorough update will be provided at the June meeting.



Fire Note 75 helps fire agencies to understand their local communities' needs.

RECENT RESEARCH BRIEFS

The Bushfire CRC has published some solid, interesting *Fire Notes* recently.

Bushfire CRC research led by Dr Christine Owen, of the University of Tasmania, scrutinised Incident Management teamwork in Australia and New Zealand and found a number of areas of concern as well as areas that work well. The work is reported in *Fire Note 73, Strategic implications for incident control systems in Australia and New Zealand*.

A working guide for fire managers, *Know Your Patch to Grow Your Patch*, from Dr Alison Cottrell, of James Cook University in

Queensland, is described in *Fire Note 75*. The guide helps fire agencies to understand their local communities' perceptions, beliefs and needs so as to better tailor community safety policies.

Fire Note 74, The relevance of the pack hike test for Australian bushfire firefighters, by Dr Brad Aisbett of Deakin University, Victoria, highlights key points from a recent review of a US-derived physical test and its validity for Australian bushfire firefighters.

These and all 77 *Fire Notes* published to date are available on the Bushfire CRC website.

RESEARCH UTILISATION BLOG



NOREEN KRUSEL

In my last blog I referred to our new strategy to support the utilisation of

research over the next few years, and I have previously referred to a survey that was conducted to inform our future direction.

Well the results of that survey and the analysis of the data are now available – check it out from the link off the Research Utilisation page.

The survey looked at:

- Agency systems and processes to support utilisation of research.
- Uptake/success of Bushfire CRC tools and mechanisms.
- Potential barriers to research utilisation.

How does your agency stack up? Let us know your thoughts.

What about running the survey yourself? You might get some interesting results. It could certainly inform the development of your strategy.

Aside from giving the Bushfire CRC useful material to inform our broader approach, the survey should also be seen as a tool that can assist you as a partner.

RESEARCH BLOG

RICHARD THORNTON



Work has been progressing on the program for the Bushfire CRC and AFAC

joint conference; and we are close to the publication of the program. This will be an exciting event with many interesting speakers from Australasia and around the world.

Of particular note this year is the start of what is hoped will become an annual series: the Science Day. This is day three of the conference, where progress on science from the Bushfire CRC and the wider research community will be presented.

The primary audiences for this day will be fellow researchers from within the researcher community and, importantly, end-users who have the responsibilities for the use of the research and those who have an interest in where the future breakthroughs will come from.

The science day will have a number of international speakers, including Professor Jose Torero from the University of Edinburgh who will present on scalability of models, and Dr Mike Fromm from the Naval Research Labs in US who will speak on pyro cumulus development in large fires. The science day will have four streams: fire behaviour and weather; operations and health and safety; land management; and community safety and social sciences.

More details will be available soon, but I encourage all conference delegates to participate in this exciting new part of the conference.

RESEARCH BLOG DAVID MORRISON



I'm really pleased with the progress of our survey of Perth hills residents affected by the late summer bushfires. Everything has been bang on time and very few people we've approached have told us to go away.

We've now done approximately 400 face-to-face interviews, asking people about such topics as what they knew about

bushfire safety prior to the fires, how they interpreted and responded to messages the fire services sent out before and during fires, and the way they understand their role in fire safety.

We have also had the people we've interviewed fill out a questionnaire to send back to us, and so far between 50 and 70 per cent have been returned.

We are now about to start mailing out a survey to households that did not take part in the face-to-face exercise. About 3000 forms will start going out soon.

We've already got some preliminary results from the face-to-face survey, which we are starting to analyse. The final report is due on 30 June.

COMMUNICATIONS BLOG DAVID BRUCE



More and more people are keeping in touch with the latest news from the Bushfire CRC by "liking" our Facebook fan page. Since we can't be in contact with everyone

face to face or even by email, our Facebook page is an ideal way to be in the loop for anyone with a Facebook account who wants to know about what's happening in research, news and events from the Bushfire CRC.

Just click on the Facebook icon on the footer of our website – right next to our You Tube link, which is also worth checking out – then "like" the page.