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bushfire CRC

FIRE UPDATE

ISSUE 22 DECEMBER 2007

FIGHTING FIRES FROM THE AIR IN SEASON 2007-08

THE AERIAL SUPPRESSION RESEARCH TEAM IS PLANNING FOR AN ACTIVE SUMMER ON THE FIREGROUND

The research report "The effectiveness and efficiency of aerial firefighting in Australia Part I" was posted on the Bushfire CRC website in June, and continues to receive a large number of downloads.

The report presents a summary of findings from the project, including some preliminary analysis of operational data, which is now being finalised.

OPERATIONAL DATA COLLECTION

The research team has been collecting operational data for the last three seasons. After a busy season last year and a great response from fire agencies the team now has enough data to conduct a detailed analysis. This will help to give insight into the factors influencing the successful initial attack of bushfires with aircraft.

Subsequently, the researchers will now focus on other operational areas as they collect more field data this fire season.

The team is aiming to complement existing data set by targeting the following fire types:

* Urban interface fires
* Grassland fires (during extreme fire danger periods)
* Remote area fires
* Extended attack fires in catchment areas
* Plantation fires

Other fires will be considered for case studies upon request.

PROPOSED EXPERIMENTS

A set of field experiments have been proposed this summer. This work is to be conducted in Ngarkat Conservation Park in South Australia in conjunction with the Project FuSE fire behaviour experiments (part of Project A1.1) supported by the South Australian Department of Environment and Heritage and the Country Fire Service.

Initial experimental design work is underway to maximise the benefit of three large experimental plots (~40 ha each) available to the project. The proposed experiments will aim to test the effectiveness of different chemical suppressants (retardant, foam and gel) delivered by fixed wing aircraft. Other variables such as fuels (mallee) and fire behaviour will be held as uniform as possible between plots. The experiments are proposed for late February/ March 2008.

BACKGROUND WORK FOR A RESOURCE ALLOCATION MODEL

The research team is putting together a plan to develop models and rules for input into a resource allocation model. This work will involve investigations into dispatch rules, travel times for different resource types, fireline production rates and fire history databases, and will require collaboration with end user agencies.

Jim Gould met with researchers in Canada in November to discuss their approaches to this work.

STAFF MOVEMENTS

Jen Hollis is moving on from this project after a productive two years of data collection in Western Australia. Jen has been awarded a Bushfire CRC PhD scholarship to study coarse woody fuel consumption at the University of NSW, and will be a visiting scholar with the Ensis (CSIRO) bushfire research team.

The team wish to thank end users for their continued interest and support for the project.

ABOUT THE PROJECT

Bushfire CRC Project A3.1 Evaluation of Aerial Suppression Techniques and Guidelines is conducted by Jim Gould and Matt Plucinski of Ensis Bushfire Research (CSIRO), Greg McCarthy of the School of Forests and Ecosystems Science at the University of Melbourne, and Jennifer Hollis of the Department of Environment and Conservation in Western Australia.

More information at www.bushfirecrc.com or contact matt.plucinski@csiro.au

▲ ABOVE: AN ERICKSON AIRCRANE "ELVIS" REFILLS IN EAST GIPPSLAND, VICTORIA. PICTURE BY GREG MCCARTHY, 2007.

◀ LEFT: RESEARCHERS HAVE LOOKED AT THE RESULTS OF MANY AERIAL DROPS, INCLUDING THIS RETARDANT DROP IN EAST GIPPSLAND IN EARLY 2006. PHOTO BY STEWART KINGSTON, DSE.